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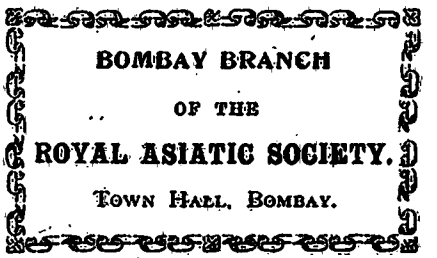

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EXERCISES,

POLITICAL AND OTHERS.

27638 ac

By Lieut. Colonel T. Perronet Thompson.

Consisting of matter previously published with and without the author's name, and of some not published before.

IN SIX VOLUMES.

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VOL. II.

Second Edition.

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PREFACE

TO ALL THE VOLUMES.

THE first impression on review of this publication, part of which dates from a considerable time back, is the very slight degree in which circumstances are substantially altered. Like the mounted sentries at the Horse Guards, they might be taken for the same instead of a succession; so like in all important points is the new face of things to the old. It may not be John, it may be Robert, whose feet are actually in the stirrups; but Robert and John are one, in the eyes of the rustic spectator who looks only to the general effect.

Scarcely any great quarrel existed at the earliest period referred to, of which the roots are not as much in the ground as ever, though some of the stalks have been pulled up. The argument on the Catholic Question, may be re-read with a transference to Church Monopolies of other kinds; and the agitation preceding the Reform Bill, may hold a lantern to show how little has been accomplished, and how much thrown away.

In the department of Political Economy, something like a manual for one side of the struggle at this moment at its height, may be collected from the subjects and quotations introduced.

On what has obtained the name of the "Greatest-Happiness Principle," a continued discussion will be found kept up. The writer would be glad to think he had availed to make the subject clearer, to any of those who profess to find difficulties in the style or matter of the original propounder.

On the Military System of Napoleon, he has endeavoured to collect and compress, what might be sought and perhaps missed, in the pages of bulletins and the comments of friends and foes. On some military questions of detail, articles and observations will be found, which must owe any interest, to having been framed under the guidance of experiment, and published generally with some view to the advancement of the liberal cause.

On the principles of Geometry as connected with the *vexata quæstio* of the Theory of Parallels, inquiries will be found which, like those of the alchemists, lead to useful results though without implying a claim to general success. On the mathematics of Music, observations and experiments will be met with, which when the tide shall set in that direction, may be turned to the improvement of the executive branch of Harmony.

The documents connected with Sierra Leone point to remarkable facts in the history of that colony. The Treaty of January

1820 in the Persian Gulph, is a transcript of the first public act in which the Slave Trade was written down Piracy.

The "Letters of a Representative" were written to the constituency of Hull, during a short period of sitting in parliament. That the consequence on the first opportunity was permanent exclusion from the House of Commons, by the exertions at different times and places of the leaders of almost every class assuming the name of Liberals, may be not without its value to such as may ever employ themselves in raking among the characteristics of the times. *Eight* Conservatives, with more or less directness, were introduced in part of process; of whom five were on the benches at once, making a difference of ten upon the votes, being within two or three of some of the majorities by which the Whigs were expelled from office.

On Irish questions, the author has gone as close to the enemy, as any sane leader could desire. The return made him, was fierce attack from the "boys" of Kilkenny, when he was seen ridden over as in the way of the compact by which three kingdoms were turned over to the Tories.

Both in those Letters, and others to various portions of the public press which follow, useful references will be found to gone-by events, and to the feelings and arguments by which they were attended. If proof is sometimes presented of the prudence of dealing with enemies as if they were some day to be friends, and with friends as if they were to be enemies, there can be nothing surprising in finding a precept of antiquity confirmed by the experience of the passing hour.

On one point, an observation may be serviceable. The writer adhered to the people called Chartists, till they denounced him in their gazette and added the enormous childishness of telling the House of Commons they wanted an edge tool and wanted it to cut the givers' throats. On such adhesion, there will of course be a diversity of opinions; but there are always enough to quit the party of the poor, the moment abiding by it will make an unfavourable balance of twenty votes at an election. The observation intended was, that much of what the Chartists did not use, might be found cut and dried for any other portion of the public, who should apply themselves to compass a substantial and not a mock Reform.

To A. S., J. S., and S. B., Esqs., the survivors of the friends mentioned in the Appendix, the thanks of the writer are due, for the readiness with which they permitted the use of Articles in which a mixture of hands was concerned.

Blackheath, London. 1 *August*, 1842.

INDEX TO ALL THE VOLUMES.

VOL. I.

Articles from the Westminster Review, 1829—1831 ; as follow.

	Page
Catholic Question (republished as "*Catholic State Waggon*")	1
Béranger's *Songs*	36
Absenteeism	52
System of Fagging	58
Banking	63
Disabilities of the Jews	70
Poor Humphrey's Calendar	79
Forty-Shilling Freeholders	82
Corn Laws	87
Quipos, or Peruvian Knot-Records	96
"*Greatest-Happiness Principle.*" No. I.	121
Slavery in the West Indies	136
Essays on the Pursuit of Truth, &c.	152
Desirableness of the Re-union of Belgium to France	165
Edinburgh Review and the "Greatest-Happiness Principle." No. II.	180
Free Trade	191
Radical Reform	219
Edinburgh Review and the "Greatest-Happiness Principle." No. III.	229
Taxes on Literature, The "Six Acts"	247
Le Représentant des Peuples	261
Religious Disabilities	269
Distress of the Country	278
Great Britain and France	287
Geometry without Axioms	306
Revolution of 1830	313
Defensive Force	328
East-India Trade	344
Machine-Breaking	353
European Revolution	373
Transactions of the Royal Asiatic Society	381
Parliamentary Reform	413
Poland and France	429
Annals and Antiquities of Rajast'han	437
Military System of Napoleon	440
Belgium and the Holy Alliance	453
Quarterly Journal of Education	462
Appel aux Représentans de la France	473
Prospects from Tory Reaction	478

Programmes to various Nos. to be found in their order.

VOL. II.

Articles from Westminster Review, 1832—1833; as follow. Page

Archbishop of Dublin on Political Economy 1
Adjustment of the House of Peers 23
Saint-Simonianism, &c. 34
Improvement of Condition of the Clergy 75
Silk and Glove Trades 95
Enharmonic of the Ancients 99
French Commerce 159
Dr. Chalmers *on Political Economy* 167
Renewal of Bank Charter 200
Supplement to Article on Silk and Glove Trades . . . 218
Prospects of Reform 225
McCulloch's *Edition of the "Wealth of Nations"* . . . 238
Gardiner's *Music of Nature* 282
Second Supplement to Article on Silk and Glove Trades . 303
Wainewright's *Vindication of Paley. Fort Risban* . . . 306
Supplement to Article on Renewal of Bank Charter . . . 314
Viscount Milton's *Address to the Landowners on the Corn Laws* 316
The Fall of the Constitution 320
Report of Secret Committee on Bank Charter 329
Harmonics of the Violin 337
Bishop of Bath and Wells *on Commutation of Tithes* . . 345
Colonel Torrens's *Letters on Commercial Policy* . . . 351
Third Supplement to Article on Silk and Glove Trades . 358
Policy, Justice, and Consequences of the Dutch War . . 368
Equitable Adjustment (with Tables by Mr. J. Childs of Bungay) . 374
Booth's *Free Trade as it affects the People* 392
Effects of Abolition and Commutation of Tithes . . . 401
Fourth Supplement to Article on Silk and Glove Trades . 406
Colonel Torrens's *Additional Letters on Commercial Policy* . 409
Musical Periodicals 414
Ireland 417
Property Tax 433
Whewell's *First Principles of Mechanics* 441
Nathan *on the History and Theory of Music* 459
A Free Trader's Defence of the "Mercantile System" . . 466
London University Magazine. Note on Austin's Jurisprudence . 479
Otto *on the Violin* 482
Question of Absenteeism reducible to the Principles of Free Trade 486
Notes and Additions to various parts 496
Programmes to various Nos. to be found in their order.

VOL. III.

Articles from Westminster Review, 1834—1835, with Appendix; as follow.

	Page
Dr. Chalmers's *Bridgewater Treatise*	2
Jews' Harps, &c. Life of Eulenstein	22
Importance of Belgian Independence	36
Economy of paying twice over	43
The Suffering Rich	70
Royal Society and M. Legendre	79
Use of the Subjunctive Mood in English	89
Impressment and Flogging	93
Quarterly Review, &c. in Support of Corn Monopoly	100
Bentham's *Deontology*	108
Pamphlet in Modern Greek and French, on Out-post Cavalry	126
Do. on Telegraphers for Field Service, horse and foot	134
First Report of Messrs. Villiers and Bowring	137
Cab and Omnibus Nuisance	148
Bordwine's *New System of Fortification*	153
John Hopkins on Political Economy	159
Enharmonic Organ	165
Contre-Enquête	177
Lady Morgan's *Princess*	216
Jacquemont's *Letters from India*	239
Table-Talk of S. T. Coleridge	248
Mrs. Loudon's *Philanthropic Economy*	254
Woolhouse's *Essay on Musical Intervals, &c.*	290
Programmes to various Nos. to be found in their order.	

APPENDIX.

	Page
Instrument of Exchange	295
Arabs and Persians	344
Prospects of the Coloured Races	406
Stuart's *Three Years in North America*	416
Present Posture of Affairs	430
Banim's *Canvassing*	447
Extract from Article on *Military Law*	463
Extract from Article on *Sugar without Slavery*	464
Miscellaneous Extracts from Westminster Review	466

VOL. IV.

	Page
Sierra Leone.—1808	1
On Morals and Law.—1813	4
What is a Constitution?—1814	23
What is a Rightful Government?—1815	26
Treaty in Persian Gulph. 1820. (Copy in Arabic and English).	29
Correspondence on Slavery, &c. (Arabic and English)	40
Respective Values of a good and bad Harvest.—1830	44
Letter to Earl Grey on the Adjustment of the House of Peers.—1831	47
Letters of a Representative to his Constituents, during the Session of 1836	61
Do. during the Session of 1837	195
Collections of Addresses, &c. 1837—1840	303
Lectures on various subjects	365
The True Theory of Rent (Pamphlet republished)	399
Catechism on the Corn Laws (Pamphlet republished)	459
Mirage on a Heated Wall in Greenwich Park	580

VOL. V.

Letters to various Journals, between March 1840 and the end of the year	1

The Letters are orderly arranged, and the subjects stated in the running head at the top of each page.

VOL. VI.

Letters to various Journals, in the years 1841 and 1842	1
Addenda. Geometrical	433

ERRATA.

In Vol. I. p. 368, *line* 25, *for* nigh *read* high.

In Vol. II. p. 136, *line* 5, *for* Chapter XVII *read* Chapter XVIII.
p. 217, *last word, for* ou *read* no.
p. 224, head line, for *Supplement to Article on* read *Supplement to Article on Silk and Glove Trades.*

In Vol. III. p. 97, bottom line, for *Imprisonment* read *Impressment.*
p. 175, *line* 36, *for* inferrible *read* inferible.
p. 292, *line* 21, *for* useully *read* usefully.
p. 433, *line* 35, *dele* * *at the end.*

In Vol. IV. p. 63, *line* 2, *for* 1838 *read* 1836.
p. 309, *line* 21, *for* 1837 *read* 1838.

In Vol. VI. p. 67 *and p.* 90, two Letters to the *Editor of the Statesman* should be transposed; as is apparent from their dates.

END OF INDEX.

Programme to the Westminster Review for 1 January, 1832.

THE new Bill for Reform has been read a Second time in the House of Commons, with a majority of votes which, on comparison of the excess with the minority, may be stated as being to the majority on the Second Reading of the former Bill, as 17 to 10. Under such circumstances the Sibylline books will be again presented to the Lords.

The outpost of Poland has been abandoned to destruction, and that of Belgium withdrawn; there is therefore no obstacle to attempting the restoration of legitimacy on the continent, except the possible agitation of the populace on the passage of the Rhine. The commotions at Lyons have taken no political turn; and the students in medicine have been put down by the *garde municipale*. So that on the whole, France may be said to be waiting quietly for the "Parisawski."

The second rejection of the English Reform Bill will probably be the signal for a general attack on France and Belgium; and the British people will have the option of engaging in an interminable war against freedom, or a Revolution. There can be no doubt that a vast majority of the community considers the last as beyond comparison the least evil of the two.

It is desired to say a few words on a book which has been the subject of a review. The "Tour of a German Prince" contains many passages not much more likely to have been the unaided production of a foreigner, than the "Vicar of Wakefield." His Highness either never blunders, or does it as much *à propos* as the Chinese in the Citizen of the World. The only palpable exception, is in the story of the romantic bookseller at Monmouth; and this may have been done by design, to keep down the remainder. He displays an inexplicable knowledge, for a German, of English and Irish society, and of what is found to be piquant and interesting within its bounds. He describes all this, and nothing else. No man ever heard anything ap-

proaching to it, from any tangible foreigner he has had the fortune to be acquainted with. Besides, it lacks *Germanity;* the Germanisms in the whole are not greater than might be collected in a three years' residence. The writer of the article was requested on this point not needlessly to compromise interests which were not his own; and he only did it the more. There was no necessity for entering on the question at all; but since it *has* been entered on, all that is asked is, that if in a year or two the "Tour of a German Prince" should be avowed as the production of a young Irishman of good family in foreign service during his two years furlough, done into choice German by the very able chaplain of his regiment, the jest may be against the individual critic and not against the Westminster Review. The book is a defence of the Irish Catholics, and a satire on the Reformation Society; and everything else is ornament and garnish. As for "misrepresentation,"—there would be as much chance of charging De Foe with the non-existence of Robinson Crusoe, of York, mariner. The feelings of the author on all subjects, are those of an Irish, not a German patriot; and even his *doubles entendre* are taken from the home establishment. It would be good to have the extended opinion of foreign judges, not on the German of the respectable chaplain, but the nationality of the author.

Westminster Review, 1 January, 1832.

Art. I.—*Introductory Lectures on Political Economy, being Part of a Course delivered in Easter Term*, 1831. By Richard Whately, D.D. Principal of St. Alban's Hall; Professor of Political Economy in the University of Oxford.—London. Fellowes. 1831. 8vo. pp. 238.

THERE is a science of which the more it is studied the less there is known; a science, consequently, which is the gift of nature in certain places, like the faculty of producing the finer wines. It resembles poetry, in that its possessors are born and not made; and woodcocks, in as much as the quantity is not increasable by human art. This science is Political Economy; and the limit to which it is confined, is the Tory side of the House of Commons.

Such at least is the account given by the owners, whenever they can be induced to lay aside the modesty with which, like the saints in scripture, they request to be informed when they ever exercised the science at all. Betrayed by their humility into the most graceful of mistakes, they require to be forced into the acknowledgment, that in the least of the questions which they have been in the habit of determining, they were innocently political economists.

Many are the reasons which have led such well-meaning individuals into a dislike of any political economy but their own. One of the most prominent was always, a religious scruple; and great must be their mental consolation, when they are informed by a theologian who has since become an archbishop, that there is no necessary connexion between infidelity and any portion of the science of exchanges.

There is in truth no more fatal symptom for the complex system of ignorance and wrong which appears to be just now tottering to its decease, than the impossibility under which the enemy has laboured, of preventing the advance of knowledge into the very fortresses of his strength. *Vestra omnia implevimus* has become a lawful boast, when Oxford teaches political economy, and mitred heads are among the prophets. The common foe must fall, because his own recruits are taught it is for their good that he should end. He will die off, like the *grosses perruques* of our ancestors, because no efficient number of individuals will feel interested in the continuation of the species.

That a University, and one not considered as the most forward in the cultivation of modern discoveries, should have produced an endowment so liberal and so well directed to the attainment of its object as the Drummond Professorship of Political Economy, and should further have been so fortunate in *two* of the earliest occupants,—is perhaps a proof, and a consequence, of the efficacy of the brilliant and well-directed sarcasm, which represented academical institutions as given to perform the office, like moored hulks, of marking the velocity of the passing stream. That such things were, is not for denial now; that they should in any degree have ceased to be, is honourable at once to the reprover and reproved.

The Professor of Political Economy at Oxford is bound, under the directions of the enlightened founder, to publish at least one Lecture every year; and he has gone beyond the bond to the extent of eight. Open but the way to honourable distinction,—set a man upon a hill and let him know that the world's eyes are on him to determine that he was a fool because he could not, or a knave because he would not, do something great and splendidly useful to the community,—and neither port nor prejudice will keep down the energies of the individuals who will present themselves for the discharge of duty. The danger is, of a man's being appointed to do nothing, with half a dozen others to do it for him. This last is the ingenious invention, by which office, lay and ecclesiastical, becomes a sinecure.

In the brief Preface to the Lectures, the author protests

against the *irreligious* fallacy; which, it cannot be uncharitable to conclude, he considered as in some sort indigenous to the soil. And the same subject is entered on, in the body of the Lectures.

'It has been my first object, to combat the prevailing prejudices against the study; and especially those which represent it as unfavourable to Religion. Convinced as I am, that the world, as it always in fact has been governed by political economists of some kind, must ultimately be under the guidance of such as have systematically applied themselves to the science, I could not but regard it as a point of primary importance, to remove the impression existing in the minds of many, both of the friends and the adversaries of Christianity, as to the hostility between that and the conclusions of Political Economy.'

'It was indeed, in great measure, this feeling, that induced me to offer myself as a candidate for the Professorship. I considered myself, in this, to be contributing, as far as lay in me, to second what has been done by the University of Oxford, towards counteracting the false and dangerous impressions to which I have alluded.'

'By accepting the endowment of a Professorship of Political Economy, the University may be regarded as having borne her public testimony against that prejudice; and as having thus rendered an important service to the public, independently of the direct benefits resulting from the cultivation of the science. And subsequently, in appointing to the Professorship one of her members, who is not only professionally devoted to the Ministry of the Gospel, but whom she has judged worthy (in the office of Bampton Lecturer, and three times in that of Select Preacher) to offer religious instruction to an academical audience, she has implied the full conviction of a Body which is above all suspicion of indifference to Christianity, that there is at least no discordancy between that and the pursuits of the political economist. However slender may be my qualifications in the science, (a science which no one, I conceive, has as yet fully mastered,) the University has at least testified, in the appointment, the most complete dissent from the notion, that the studies of Political Economy and of Theology are unfriendly to each other.'—*Preface, p.* vi.

'That Political Economy should have been complained of as hostile to Religion, will probably be regarded a century hence (should the fact be then on record) with the same wonder, almost approaching to incredulity, with which we of the present day hear of men sincerely opposing, on religious grounds, the Copernican system. But till the advocates of Christianity shall have become universally much better acquainted with the true character of their religion, than, universally, they have ever yet been, we must always expect that every branch of study, every scientific theory, that is brought into notice, will be assailed on religious grounds, by those who either have not studied the subject, or who are incompetent judges of it; or again, who

are addressing themselves to such persons as are so circumstanced, and wish to excite and to take advantage of the passions of the ignorant.'—*p.* 29.

The First Lecture is on the meaning and objects of Political Economy. The objections to the name, are not particularly fortunate; especially as it is stated to be "too late to think of changing it." Geometry, in its origin, evidently meant land-surveying; and it is of little consequence now, *what* it meant, except as it may assist in the examination of the way in which the intellect of man proceeded to the greater from the less. It is certain that no direct light is thrown on the nature of Geometry, by the information that it meant land-surveying; and equally little obscurity is likely to be shed on Political Economy, by defects in its derivation. But the derivation itself, is not so bad as is contended. The word "economy" had long been used in other senses than that of "the regulation of daily expenditure;" nor is this the primary signification after all, which is that of "keeping a house in order." Two ladies have contributed by instalments, the completest definition of Political Economy. Mrs. Hannah Moore says, "A sound *economy*, "is a sound understanding brought into action; it is calcula- "tion realized; it is the doctrine of proportion, reduced to "practice; it is foreseeing consequences, and guarding against "them; it is expecting contingencies, and being prepared for "them." And Mrs. Marcet adds, "You need only extend your "idea of the economy of a family to that of a whole people—of "a nation, and you will have some comprehension of the nature "of *political* economy."

But whatever be the name, the Professor is not disposed to give way on the merits of his science.

'As for the vehement vituperation lavished on the study of Political Economy which you will be prepared to hear, though, of course, not to answer, I will only remark, that I think it on the whole no unfavourable sign. Invective is the natural resort either of those who are incapable of sound reasoning altogether, or are at a loss for arguments to suit their present purpose: supposing, that is, of course, in each case, as far as they are not withheld by gentlemanly or Christian feeling. In proportion therefore as any branch of study leads to important and useful results—in proportion as it gains ground in public estimation—in proportion as it tends to overthrow prevailing errors—in the same degree, it may be expected to call forth angry declamation from those who are trying to despise what they will not learn, and wedded to prejudices which they cannot defend. Galileo probably would have escaped persecution, if his discoveries could have been disproved, and his reasonings refuted. The same spirit which formerly consigned the too powerful disputant to the dungeon or the stake, is now, thank heaven, compelled to vent itself in railing; which

you need not more regard than the hiss of a serpent which has been deprived of its fangs.'—*p.* 16.

He proceeds to notice the "complaint urged against writers on Political Economy for confining their attention to the subject of Wealth." And this, he says, "sounds very much like a complaint against mathematicians for treating merely of quantities; or against grammarians for investigating no subject but language." But there is a broader ground than this. Wealth altogether, has been an ill-treated entity. There has been a plot against it, at all events from the days of Nimrod. What is wealth, but *well-being?* "In all time of our tribulation, in all time of our *wealth*." It is true that in Political Economy the term is restricted to such formulas or incorporations of well-being, as may be secured, promoted, or attained, through the possession of those objects of desire which carry with them a generally admitted power of ministering to enjoyment, and as such may be made the subjects of exchange. But what is there that, directly or indirectly, is not affected from this source? Is health?—is poetry?—is love?—let a reward be offered for the discovery of any human good, which has not the possession of the means of bodily comfort, first or last, for an element. The answer of the opponents is only, that these things cannot be bought in the market by the ounce; but the real question is, whether the state of things which Political Economy concerns itself with, is not the basis of them all. Do the poor and miserable suffer least by Cholera? Have there been many poets in New Holland? Do Abelards abound in Patagonia? Is a good conscience peculiar to mendicity? Does heroism flourish among paupers? Is religious hope the distinguishing attribute of savage life? There is clearly a combination in the wind; and the whole is soluble on the recollection that the world is under the direction of two antagonist principles, the desire to keep, and the desire to take away. The past history of mankind is in the main a history of the conquests of the latter principle; and it is only in comparatively modern periods, that the other has made head against its antagonist with any marked success. The foreign and domestic policy of those who are styled the ancients, may be summed up in the maxims that everything possible was to be taken by force from foreign nations, and everything produced by the industrious at home was for this purpose to be at the service of the takers. These were the classical definitions of courage and patriotism; and to this day they make great part of the stock in trade of that band of men leagued together to oppress, whom the country is in the act of endeavouring to throw from off its shoulders. Why will nobody re-write the Greek and Roman histories, and give us an insight into the

Toryism of antiquity? The ignorance is awful. Respectable gentlemen, in and out of parliament, suppose to this hour that the Agrarian Law was an attempt at the division of private property. Who has not been taught to believe, that the Gracchi were seditious? Who knows anything about the Catilinarian conspiracy, except that it was manifestly a plot in a green bag, and Cicero a Tory Secretary for the Home Department? What was the exact nature of the combination, which had the future Wellington of Rome, the youthful Cæsar, among its connexions? And what was the real merit of the bugbear, so eminently conservative and ministerial, on the subject of the Allobroges? All that is ordinarily known of the whole question, is just such an approximation to the truth, as would be made by stating that in the year 1820, certain men, to wit one Thistlewood and others, of mere malice and at the simple instigation of the devil, did without any connexion whatever with old disputes, or popular grievances, or accumulated sense of wrongs, and principally with a view to overturn social order, combine and unite and actually propose and proceed, to kill and slay the purest, the kindest, the worthiest, and most excellent set of ministers that any country had been blessed with within the memory of man. No person can fail to be conscious of the immense mass of matter for the historian, which would lurk behind such a representation as this, whatever might be the quantum of guilt and folly finally attributable to the individuals charged; and just so much there must be behind the conspiracy of Catiline. Who, again, can tell anything about the pretended conspiracy of the Bacchanalians; which is stated to have had above seven thousand members in Rome and other parts of Italy? In the general tone of the charges there is a strong resemblance to those brought against the early Christians. The speech of the Consul as given by Livy *, declares the association had political objects. Multitudes of both sexes were imprisoned and put to death, on the evidence of a retired courtezan; the means by which the overthrow of the state had been pursued, being represented to have been, "false evidence, counterfeit seals, and forged wills." So irresistible was the tyranny, that the women were given up to their relations, with an intimation that they must be put to death. The speech of the Consul is a mass of Tory common places, and the whole charge bears every internal mark of falsehood. The association must have been a kind of Corresponding Society; having in view to upset the Pontifex Maximus, and roast the chickens in the sacred coops. Nothing but what we are all acquainted with under the name

* Book 39.

of "zeal for social order,"—in other words the eagerness to defend against innovation some huge system of profitable wrong,—can present a cause adequate to the declared effect; and the enactments to prevent the revival of the society, show the authors of the Gagging-Bills had not gone to school for nothing. The materials are confessedly scanty; but if the Roman women were the Italian boy, there would be enough for Bow-Street to trace the authors of the murder. The Greek literature has long been a mine for digging up every kind of ancient abuse against the people. These, and many more that might be adduced, are instances of the obscure though not absolutely impervious medium through which the present age views ancient history; and at the head of these illusions, is the great illusion of all, on wealth and poverty. Wealth was to be discreditable, unmanly, vituperate, because it was found greatly to indispose men to be active thieves. Poverty was to be held in honour, when it meant that kind of disengagement from worldly things, which makes an Arab of the desert ready to place his services at the disposal of any chief that proposes to rob a caravan. This is the sorry explanation, of the ancient theory of heroic poverty.

The modern robber caste have no less objection to wealth than the ancient. They tolerate it only as they are to have the benefit. They know full well that the extension of the true principles of wealth and commerce has the strongest imaginable tendency to put down the trade of war and crime which is theirs *par excellence*. The "fighting-cock" principle which trains men to act against their fellows whenever the chiefs at home shall think other nations too free or happy for good example, would receive its death's blow from such a spread of knowledge. That there will never be another commercial war, is already assuming almost the power of an axiom; to the loss and horror of "persons of sound principles" throughout the world.

'As for the latter part of the objection above noticed, that men are already too eager in the pursuit of wealth, and ought not to be encouraged to make it an object of attention, the mistake on which it proceeds is one which you will meet with only in the young, (I mean, either in years, or in character,) and which you will readily remove in the case of those who are even moderately intelligent and attentive. You may easily explain to them that Political Economy is not the art of enriching an individual, but relates to Wealth generally;—to that of a nation, and not to that of an individual, except in those cases where his acquisition of it goes to enrich the community. You may point out to them that wealth has no more necessary connexion with the vice of *covetousness*, than with the virtue of *charity;* since it merely forms the subject-matter about which the one as well as the other of these is concerned: and that investigations relative to the nature, production, and distribution of wealth, have no greater con-

nexion with sordid selfishness, than the inquiries of the chemist and the physiologist respecting the organs and the process of digestion and absorption of nutriment, have with gluttonous excess. And you may add, that individuals the most destitute of systematic knowledge, and nations not only ignorant but comparatively poor, are at least as prone to avarice as any others. The Arabs are among the poorest, and the most covetous, of nations; and most of those savage tribes, who have not even the use of money, are addicted to pilfering and plunder of every thing that is wealth to them.'—*p.* 25.

The same subject is found continued in the Second Lecture.

'You will hear it said indeed, with undeniable truth, that wealth is not necessarily a benefit to the possessor. No more is liberty, or health, or strength, or learning. But again you will also meet with some who contend, that a poor country is more favourably situated for virtue than a rich one; and with others who, without going this length, maintain, that as with individuals, so with nations, a *certain degree* of wealth is desirable, but an excess, dangerous to the moral character. Either or both of these points, you may concede for the present; i. e. waive the discussion of them, as far as regards the question concerning the *importance* of the study we are speaking of. For if it be granted that we are to dread as an evil the too great increase of national wealth, or, that wealth is altogether an evil; still, it is not the less necessary to study the nature of wealth, its production, the causes that promote or impede its increase, and the laws which regulate its distribution. We should go to the fountain-head of the waters, whether we wish to spread them abundantly over our land, or to drain them entirely away, or to moderate and direct the irrigation. If wealth, or great wealth, be regarded as a disease, we should remember that bodily diseases are made the subject of laborious and minute inquiry by physicians, as necessary with a view to their prevention and cure. Formerly, nearly all practitioners recommended inoculation with small-pox; though the practice had been much opposed at its first introduction; now, they are almost unanimous in preferring vaccination; but in any stage of either of the controversies which arose respecting these modes of practice, a man would have been thought insane, who should have questioned the importance of studying the nature, symptoms, and effects of small-pox.'

'As for the doctrine itself, that national wealth is morally mischievous as introducing *luxury*, (in the worst sense of the word,) effeminacy, profligacy of manners, and depravation of principle, it has been inculcated in a loose declamatory way, by a great number of moralists, who have depicted in glowing colours the amiable simplicity of character, the manly firmness, and the purity of conduct, to be met with in nations that continue in primitive poverty; and the degeneracy that has ensued in those which have emerged from this state into one of comparative wealth. Almost all these writers furnish a strong confirmation of what has been just advanced; viz. that whether wealth be a good or an evil, or each, according to the amount of it—

on any supposition, it is still no less a matter of importance to examine and carefully arrange the facts relating to the subject, and to reason accurately upon it, if we would avoid self-contradiction. For you will often find men declaiming on the evils consequent on wealth, and yet, in the next breath, condemning or applauding this or that measure, according to its supposed tendency to impoverish or to enrich the country. You will find them not only readily accepting wealth themselves from any honourable source, and anxious to secure from poverty their children and all most dear to them; (for this might be referred to the prevalence of passion over principle;) but even offering up solemn prayers to heaven for the prosperity of their native country; and contemplating with joy a flourishing condition of her agriculture, manufactures, or commerce; in short, of the sources of her Wealth. Nor is even this the utmost point to which you will find some carry their inconsistency; for you will meet with objections to Political Economy, (meaning thereby either some particular doctrines maintained by this or that writer, or else, all systematic attention to the subject,) on the ground that it has for its object the increase of wealth, which is hurtful; and again, that a country which is governed according to its principles, is likely to be impoverished by them. Now the most erroneous doctrines in Political Economy that ever were promulgated, (and very erroneous ones certainly *have* prevailed,) can hardly be chargeable with *both* these consequences. The same system cannot at once tend to make us rich, and also to make us poor.'—*p.* 40.

'Many measures indeed have been advocated, which really tend to impoverish the country—many opposed, which tend to enrich it; but never, *on those grounds*. It has been always from their tendency being, at least professedly, understood to be the reverse. Much lavish expenditure again has often been recommended for inadequate objects; but always on the ground that the object *was* adequate. I never heard of any one, even of those who in theory deprecate the increase of national wealth as an evil, being consistent enough in practice to advocate any measure on the ground that it tends to destroy wealth, and for that express purpose; or to oppose a measure on the ground that it will too much enrich the country. The fact is, the declaimers against wealth are, by their own showing, mere declaimers, and nothing more; who, rather than say nothing, will say what militates against their own conclusions. They recommend or oppose measures, as conducive, or as adverse, to national wealth: and then if their arguments are tried by the test of well-established principles, and they are exhorted systematically to study these principles, and, before they attempt to discuss questions connected with wealth, to bestow a regular attention on the subject, they turn round and inveigh against such a study because it *has* wealth for its subject, and wealth is a pernicious thing: which would not lessen the importance of such studies, if it were true; and which they themselves have practically admitted, is not true.'—*p.* 61.

This is all so good, that it would be wicked to try to add to it. *Luxury*, as has been intimated before, meant with the

ancients nothing but an inaptitude to become the tools of plunderers.

In the Third Lecture, the practical fraud involved in the appeals continually put forward to *common sense*, is not elucidated with perfect success till after several efforts; though it cannot be denied that it is done effectually in the end. Common sense means only the degree of sound judgment which is common to mankind; and when a fraud is supported by an appeal to common sense, the snare will always be found to lie in the selection of the data on which the exercise of the faculty is requested. Thus if an Englishman can make gloves for *three* shillings a pair, and it is clear his trade must be put down if his countrymen are allowed to buy gloves of the same quality from foreigners for *two*,—the question thrust forward for the decision of common sense, is whether it is just and politic that an Englishman's trade shall be put a stop to. But garnish the question with all the concomitant facts,—state that the trade of this Englishman is created by the destruction of the trade, first of some Englishman to the amount of the goods that would be required to purchase the gloves from foreigners, and secondly of some other to the amount of the difference (the *one* shilling) which would have been laid out on him by the consumer of the gloves if it had been left in his possession, and that in addition to all this there is the clear and unbalanced loss of one shilling to the consumer, so that if all men could be consumers under the same circumstances in their turn, there would be a loss of the same kind as if they should agree to throw a shilling each into the sea;—let all this be stated, and then ask what verdict common sense will give upon the question, and in what clime, or district, or parish, an individual will be found sufficiently idiotic to stand out for the reasonableness of the proceeding. The supporters have a sinister purpose, their own gain; and they trust to being able to persuade their neighbours to adjudge the question on their showing. They run about with half a watch, and insist on men's going to bed because the hands point to midnight.

'There is no fear that we shall ever in practice have too little call for deliberation—too little need of judicious conjecture. Science does not enable us to dispense with common-sense, but only to employ it more profitably; nor does the best-instructed man necessarily deliberate the less; only he exercises his deliberation on *different* points from those that occupy the less-instructed; and to better purpose.'—*p.* 70.

'In matters connected with Political Economy, the *experience* of *practical* men is often appealed to in opposition to those who are called theorists; even though the latter perhaps are deducing conclusions

from a wide induction of facts, while the experience of the others will often be found only to amount to their having been long conversant with the details of office, and having all that time gone on in a certain beaten track, from which they never tried, or witnessed, or even imagined, a deviation.'—*p.* 74.

'It may be added, that there is a proverbial maxim which bears witness to the advantage sometimes possessed by an observant bystander over those actually engaged in any transaction. "The looker-on often sees more of the game than the players." Now the looker-on is precisely (in Greek Θεωρὸς) the *theorist*.'

'When then you find any one *contrasting*, in this and in other subjects, what he calls experience, with theory, you will usually perceive on attentive examination that he is in reality comparing the results of a *confined*, with that of a *wider*, experience;—a more imperfect and crude theory, with one more cautiously framed, and based on a more copious induction.'—*p.* 74.

The same individuals that affix such narrow bounds to common sense, have however no objection to theories, when they happen to be their own.

'The illustrations which I have given from other subjects are extremely inadequate; for I know of none in which so much theory, and that, most paradoxical theory, has been incorporated with experience, and passed off as a part of it, as in matters concerning Political Economy. There is no other in which the most subtle refinements of a system (to waive, for the present, the question as to its soundness) have been, not merely admitted, but admitted as the dictates of common-sense. Many such paradoxes, as I allude to, (whether true or false, we will not now consider,) you may meet with in a variety of authors of the present, but much more of the last and preceding centuries; and may not unfrequently hear in conversation. That a state of war is favourable to national prosperity—that it is advantageous to a nation to export goods of more value than it receives in return—that we are losers by purchasing articles where we can get them cheapest—that it is wise for a people to pay, on behalf of a foreign consumer, part of the price for which he purchases their commodities—that it is better to obtain the same results by much labour than by little—that a man is a benefactor to the community by building himself a splendid palace—and many other doctrines that are afloat, may be truths, but they are at least *paradoxical* truths;—they may be abstruse and recondite *wisdom*; at any rate, they are *abstruse and recondite*;—they may be sense, but at least they are not *common*-sense.'

'And again, many conclusions maintained by men who have had much experience, of one kind or other, though they may be *just* conclusions, yet cannot be said to have been brought to the test of experience. For instance, that a country would be enriched, by having, what is called, a favourable balance of trade with all the world, i. e. by continually exporting more in value than the goods it imports, and consequently receiving the overplus year by year in money, and exporting none of that money—this has been held by a great number of

men, long conversant with public affairs, and so far, men of experience. But the doctrine itself, whether true or false, cannot be said to have been established by experience, because the experiment has never been tried. Many, indeed, *have* tried, for ages together, to *bring about* such a state of things; but as it is notorious, that they have never succeeded—that no country ever has been so circumstanced—the experiment cannot be said to have ever been tried what would be the *consequences* of attaining such an object; nor can they therefore be said, (however *right* they may be as to the desirableness of the object,) to know by experience that it is conducive to prosperity. Such experiments, therefore, are like those of the Alchemists, who did indeed try innumerable, with a view to discover the philosopher's stone; but cannot be said to have tried the experiment, whether that stone which converts all things into gold, is, or is not, a universal medicine. That it is possible to find a method of transmuting metals, and that it would be connected with the art of healing, has never been disproved; but one who believes this, however rightly, cannot be said to found his belief on experience.'—*p.* 78.

'I shall proceed to offer a few remarks on that very prevailing idea, that Political Economy is a subject which may be studied by any one whose taste particularly leads him to it, but which (with the exception perhaps of a few who take a leading part in public affairs) may safely be disregarded by the generality, as by no means necessary to make up the character of a well-educated man.'

'It may perhaps be conceded, that each should regulate his studies according to his own judgment and inclination, provided he will consent to refrain from taking a part in matters to which he has not directed his attention: but this at least seems an equitable condition: "*Ludere qui nescit, campestribus abstinet armis.*" It is a condition, however, which in the present subject is very little observed. The most difficult questions in Political Economy are every day discussed with the most unhesitating confidence, not merely by empty pretenders to Science, (for that takes place, and must be expected, in all subjects,) but by persons not only ignorant, but professedly ignorant, and designing to continue so, of the whole subject;—neither having, nor pretending to have, nor wishing for, any fixed principles by which to regulate their judgment on each point. Questions concerning taxation, tithes, the national debt, the poor laws—the wages which labourers earn, or ought to earn,—the comparative advantages of different modes of charity, and numberless others belonging to Political Economy, and many of them among the most difficult, and in which there is the greatest diversity of opinion, are debated perpetually, not merely at public meetings, but in the course of conversation, and decisions of them boldly pronounced, by many who utterly disclaim having turned their attention to Political Economy. The right management of public affairs in respect of these and such like points, is commonly acknowledged to call for men of both powerful and well-cultivated mind; and yet if every man of common sense is competent to form an opinion, at the first glance, on such points, without either having made them the subject of regular study, or conceiving that any such

is requisite, it would follow that the art of government (as far at least as regards that extensive and multifarious department of it, pertaining to National Wealth) must be the easiest of all arts;—easier than even the common handicraft trades, in which no one will knowingly employ a man who has not been regularly taught. And the remark of the Chancellor Oxenstiern to his son, "*quàm parvâ sapientiâ regitur mundus,*" must be understood to apply not only to what is, but to what ought to be, the state of things.'

'Many of you probably have met with the story of some gentleman, (I suppose it is usually fathered on a native of a neighbouring island,) who, on being asked whether he could play on the violin, made answer, that he really did not know whether he could or not, because he had never tried. There is at least more modesty in this expression of doubt, than those show, who, having never tried to learn the very rudiments of Political Economy, are yet quite sure of their competence to discuss its most difficult questions.'

'You may perhaps wonder how it is that men should conceal from themselves and from each other so glaring an absurdity. I believe it is generally in this way:—they profess and intend to keep clear of all questions of Political Economy; and imagine themselves to have done so, by having kept clear of the *names*. The *subjects* which constitute the proper and sole province of the science, they do not scruple to submit to extemporaneous discussion, provided they but avoid the title by which that science is commonly designated. This is as if the gentleman in the story just alluded to had declared his inability to play on the violin, at the same time expressing his confidence that he could play on the fiddle.'—*p.* 83.

'What *is* the modern school of Political Economy, I cannot distinctly ascertain; nor (it is evident) can those who find fault with it; since one of their complaints is, that no such thing exists, and that, on the contrary, the greatest discrepancy prevails between the different authors who profess to teach the science. If there be, however, any points on which, notwithstanding their general discrepancy, most of these writers agree, that is certainly a strong presumption that they are right in those points. It is, however, only a presumption; not a decisive argument; since we know, that there are several points in which various philosophers agreed for many ages, yet in which it has since appeared that they were all mistaken.'

'In fact, however, it will be found, that even much greater discrepancy than is alleged, does exist among political economists, if we include, as we certainly ought to do, under that description, not merely those who usually bear the appellation, but all who discuss, and in practice decide, questions connected with national wealth;—all who recommend or adopt measures which have that object in view. All such are, properly, political economists; though many of them may be very bad ones. Those of them who may have never carefully and systematically studied the subject, whether they are in consequence the less likely, or the more likely, to arrive at right conclusions, yet do adopt *some* conclusions, and act upon them. Now a man is called a Legislator who frames and enacts laws, whether they

be wise or unwise;—whether he be by nature, or by his studies, well or ill qualified for his task. A man who attends sick persons, and prescribes for them, is called a Physician, whether he prescribe skilfully or not, and whether he have carefully, or negligently, studied anatomy, pharmacy, and nosology. So also, men are usually called Generals, and Magistrates, who are entrusted, respectively, with the command of armies, and with the administration of justice; however incompetent they may be to those offices: else we should never speak of an *unskilful* General, or an ignorant Magistrate. And on the same principle, one who forms opinions, and frames or discusses measures, relative to the matters we are now speaking of, is a Political Economist; though he is likely to be a *bad* one, if he does so ignorantly, and at random. But in respect of this particular case of Political Economy, many men are in the condition of the Bourgeois of Molière, who had been talking prose all his life without knowing it.'—*p.* 87.

The Lecturer charitably wishes there was no such thing as Political Economy. And this opens out the important fact, that Political Economy might not unreasonably be defined, the art of preventing ourselves from being plundered by our betters. It is the grand expositor of the peccadilloes of those who volunteer to benefit mankind by governing; its professors form the great Anti-felony Association of modern times. It picks up swindlers of all calibres, as the *Roc* does elephants; and is a very ferret to the vermin that nestle in our barns and manufactories. The archbishop does not say all this in what next follows; he only means it.

'I wish for my own part there were no such thing as Political Economy. I mean not now the mere *name* of the study: but I wish there had never been any necessity for directing our attention to the study itself. If men had always been secured in person and property, and left at full liberty to employ both as they saw fit; and had merely been precluded from unjust interference with each other—had the most perfect freedom of intercourse between all mankind been always allowed—had there never been any wars—nor (which in that case would have easily been avoided) any taxation—then, though every exchange that took place would have been one of the phenomena of which Political Economy takes cognizance, all would have proceeded so smoothly, that probably no attention would ever have been called to the subject. The transactions of society would have been like the play of the lungs, the contractions of the muscles, and the circulation of the blood, in a healthy person; who scarcely knows that these functions exist. But as soon as they are impeded and disordered, our attention is immediately called to them. Indeed one of these functions did exist for several thousand years before it was even suspected. It is probable that (except perhaps among a small number of curious speculators) anatomy and physiology would never have been thought of, had they not been called for in aid of the art of

medicine; and this, manifestly, would have had no existence, but for disease. In like manner it may be said to have been diseases, actual or apprehended—evils or imperfections, real or imaginary, that in the first instance directed the attention of men to the subjects about which Political Economy is conversant: the attention, I mean, not only of those who use that term in a favourable sense, but of those no less who hold it in abhorrence, and of our ancestors who never heard it. Many, no doubt, of those evils have been produced or aggravated by the operation of erroneous views of Political Economy; just as there are many cases in which erroneous medical treatment has brought on, or heightened diseases; but in these, no one will deny that it is from correct medical views we must hope for a cure.'

'And you may add this remark; that the greater part of those who do in this way induce disease, are such as make no pretensions to the medical art, nor entertain any respect for it; they are often the foremost to declaim against the folly of trusting in physicians—of dosing one's self with medicines—of tampering with the constitution; and think themselves secure from any such folly, as long as they abstain from the use of any thing that is *called* a *medicine*; while perhaps they are actually tampering with their constitution by an excessive use of spirituous liquors, or of other stimulants, not bearing the name of medicines, but not the less powerful in their effects on the human frame. In like manner, you may observe, many have ventured boldly on measures tending to produce the most important results on national wealth, without suspecting that these had any thing to do with Political Economy, because the name of the science was carefully avoided. Buonaparte detested that name. When he endeavoured by all possible means to destroy the commerce of the continent with this country—means which brought on ultimately the war which ended in his overthrow—there is no doubt he believed himself to be not only injuring us, but consulting the best interests of his own dominions. Indeed, the two ideas were with him inseparable; for all that he himself had ever acquired having been *at the expense of others*, he could not understand how we could gain, except by their loss. Yet all the while, he was in the habit of saying that Political Economy, if an empire were of granite, would crumble it to dust. That *erroneous* Political Economy may do so, he evinced by the experiment he himself tried: but to the last he was not aware that he had been in fact practising such a system:—had been practising Political Economy in the same sense in which a man is said to be practising Medicine, unskilfully, who through ignorance prescribes to his patient a poisonous dose.'—*p.* 92.

'Anatomy and Physiology, though, as I have said, they probably owe their rise to Medicine, as that did to disease, are yet universally acknowledged to be among the most curious and interesting studies, even for those who have no design to apply them professionally in the practice of medicine. In particular, they are found, the more they are studied, to throw more and more light on the stupendous wisdom of contrivance which the structure of organized bodies displays;—in short, to furnish a most important portion of Natural

Theology. And it might have been anticipated, that an attentive study of the constitution of Society, should bring to light a no less admirable apparatus of divinely-wise contrivances, directed no less to beneficial ends;—that as the structure of a single bee is admirable, and still more so that of a hive of bees, instinctively directing their efforts towards a common object, so, the Divine Maker of the human body, has evinced no less benevolent wisdom in his provisions for the progress of society;—and that though in both cases the designs of Divine Wisdom are often counteracted by human folly—by intemperance or neglect, as far as relates to the body—and by mistake or fraud, in respect of the community—still, in each case, attentive study may enable us to trace more and more the designs of a wise Providence, and to devise means for removing the impediments to their completion.'—*p.* 96.

The Fourth Lecture is on the connexion of Political Economy with Natural Theology, which has already been suggested in the last extract. And as it is reviving to see a great soldier take the side of liberty, so is it cheering to view an eminent theologian heading the advance of human knowledge in his proper department, and shedding intolerable light upon the puny bigots that burrow into the mantle of religion for their own teazing purposes of spoil. It is quite true that the commercial like the physical world, is "fearfully and wonderfully made." The same result will probably be established of the political, when there has been time to witness a few more of its revolutions. The advancement of mankind in all these divisions of well-being, is by every reasonable inference the design of Providence. What a difference between such a conclusion in the mouth of a theologian, and the episcopal exhortations that have been parodied in satiric rhymes; and how small would ever have been the danger of the bench of bishops, if they had possessed the grace to go and do likewise.

The whole parable of the head-commissary [*pp.* 103 to 111] is exceedingly admirable and instructive, and in fact one of the most beautiful pieces of Sunday reading it ever fell to the lot of the Westminster Review to recommend. The passage upon corn-dealers will be extracted, for its bearing on a point on which the little vulgar are apt to show they can compete in folly with the great. The sentence immediately preceding, was on the necessity of raising prices and keeping back the supply from market in a time of scarcity.

'For doing this, corn-dealers in particular are often exposed to odium, as if they were the cause of the scarcity; while in reality they are performing the important service of husbanding the supply in proportion to its deficiency, and thus warding off the calamity of famine; in the same manner as the commander of a garrison or a

ship, regulates the allowances according to the stock and the time it is to last. But the dealers deserve neither censure for the scarcity which they are ignorantly supposed to produce, nor credit for the important public service which they in reality perform. They are merely occupied in getting a fair livelihood. And in the pursuit of this object, without any comprehensive wisdom, or any need of it, they co-operate, unknowingly, in conducting a system which, we may safely say, no human wisdom directed to that end could have conducted so well:—the system by which this enormous population is fed from day to day.'—*p.* 107.

The principal object of the Lecture, however, is to impress generally, the proofs of benevolent design which may be derived from Political Economy.

'And here I must take occasion to remark, that I do not profess to explain why things were so ordered, that any advancement at all should be needful;—why mankind were not placed at once in a state of society as highly civilized as it was destined ever to be. The reasons for this are probably unfathomable by us in this world. It is sufficient for our present purpose merely to remark the fact, that the apparent design of Providence evidently *is*, the advancement of mankind, not only as Individuals, but as Communities. Nor again do I profess to explain, why in so many particular instances causes have been permitted to operate, more or less, towards the frustration of this general design, and the retardation, or even reversal, of the course of improvement. The difficulty in fact is one which belongs, not to this alone, but to every branch of Natural Theology. In every part of the universe we see marks of wise and benevolent design; and yet we see in many instances apparent frustrations of this design; we see the productiveness of the earth interrupted by unfavourable seasons—the structure of the animal frame enfeebled, and its functions impaired, by disease—and vast multitudes of living Beings, exposed, from various causes, to suffering, and to premature destruction. In the moral and political world, wars, and civil dissention—tyrannical governments, unwise laws, and all evils of this class, correspond to the inundations—the droughts—the tornados, and the earthquakes, of the natural world. We cannot give a satisfactory account of either;—we cannot, in short, explain the great difficulty, which, in proportion as we reflect attentively, we shall more and more perceive to be the *only* difficulty in theology, the *existence of evil* in the Universe.'—*p.* 113.

The same point is urged in the following extract from the Seventh Lecture; which may properly be introduced in this place.

'And here, again, we may perceive the benevolent wisdom of Providence, in not making the public good dependent on pure public-spirit. He who labours to acquire, and then to communicate, important knowledge, solely, or principally, with a view to the benefit

of his fellow-creatures, is a character more admirable than it is common. Knowledge would not have made the advances it has, if it had been promoted only by such persons. Far the greater part of it may be considered as the gift, not of human, but of divine, benevolence; which has implanted in man a thirst after knowledge for its own sake, accompanied with a sort of instinctive desire to impart it. For I think there is in man, independent of the desire of admiration, (called, in its faulty excess, *Vanity*,) which is a most powerful stimulus to the acquisition and propagation of knowledge—independent of this, I say, there is, connected with the desire of gaining knowledge, a desire (founded, I imagine, on Sympathy) of communicating it to others, as an ultimate end. This, and also the love of display, are, no doubt, inferior motives, and will be superseded by a higher principle, in proportion as the individual advances in moral excellence. These motives constitute, as it were, a kind of scaffolding, which should be taken down by little and little, as the perfect building advances, but which is of indispensable use till that is completed. To these inferior motives then, (which those who delight in degrading human nature, by applying to each propensity a name implying something faulty or contemptible, would call, Curiosity and Vanity,)—to these, with an intermixture greater or less of higher motives, we owe the chief part of the progress of society in knowledge.'—*p.* 175.

The Fifth Lecture contains a disputable theory; but one that only remotely involves any practical inferences. The theory alluded to, is that men never did nor can raise themselves from a state of complete barbarism, without instruction and assistance from people already civilized; from which it is concluded, that civilization must have been the effect of a supernatural revelation made to some portion of the human species, and that all savages must originally have degenerated from a more civilized state of existence. Of this degeneration, the Lecturer thinks there is little reason to doubt, that the principal cause has been War. Objections may be urged to the theory, without questioning any of the authorities to which the author refers. The only notices of arts furnished by the record of Genesis [as noted by the author in p. 139] consist of two,—the working of metals, and the construction of musical instruments; and in neither case is there any intimation of supernatural instruction. Some appearance of an opposite nature might be held to be contained in the mention made of "coats of skins;" but the author himself has not considered this as ground whereon to found an argument. If knowledge came originally by inspiration, the chosen race contrived to carry away very little of the benefit. The inhabitants of Egypt had far outstripped them, when their patriarchs entered that house of bondage; or Moses would never have been celebrated as "learned in all the wisdom of the

Egyptians." Many ages afterwards, Solomon or his historians knew no nearer proportion of the circumference of a circle to the diameter, than that of three to one*. There was no necessity for saying what the circumference was at all; and a writer who had known that the circumference of a circle of ten cubits diameter was on a rough estimate thirty-one cubits and a half, would never have volunteered asserting it was thirty. It is scarcely credible that a native of New Holland should not know that the girt of a tree is more than three times its thickness. Whatever Solomon might have done for botany or zoology, it is clear he had not done much for the geometry of his subjects. But there is an objection of a more general nature. Is not all improvement under the direction of divine providence; and could not the same agency that without a miracle led man to the Newtonian Theory, lead him to [as instanced by the author in p. 139] *fire*? There are races that have not yet learned to boil; and in a temperate climate well stored with vegetable productions, it is undeniable that man might exist for some time without having learned to roast. In such a situation there is no absolute necessity for fire. The children of Israel have been pourtrayed with musquets; but no painter ever thought of lighting a fire in paradise. And if a diminution of man's comforts accompanied his fall, there is nothing unphilosophical in believing it might be such a change as he could live through without a miracle. Lightning and volcanoes might be phænomena from which an early-world philosopher would be most likely to run away; but a conflagration of the brush-wood, which might arise from either of these without his knowledge, would afford an opportunity of learning the warming property of fire, which the Orang Outan is said to profit by, though his limited intellect does not go the length of prolonging the flame. But besides these accidental sources, in several parts of the world there are natural gas-lights; and if the habitual use of fire should have begun near one of these, it would at all events be nothing supernatural. There are traces of the fact, that fire from this precise source was carried to great distances, and preserved with excessive care; and there is no improbability in this having had its origin in necessity. The first use of fire would be to warm; but after it had been habitually applied to this purpose, no miracle would be required to roast a chestnut, or to produce that odour of torrified flesh or fish which acts with such irresistible invitation on the organs of the hungry. And when men had arrived at this point, the discovery of the different

* 1 Kings, vii. 23. 2 Chron. iv. 2.

means of kindling fire without the trouble of carrying it about, might safely be left to time;—there appearing no more absolute necessity for the primitive method of rubbing two sticks together being taught supernaturally, than for the last-invented "Promethean." In the chosen instance of fire, therefore, there is no *nodus* worthy of supernatural interference.

The weakness of the Lecturer's argument appears to be, that he has shown no necessity for the supernatural origin of any one of the arts which make the difference between civilized men and savages. And if it was claimed for any of the arts which are held in common with savages, it is difficult to see how that would prove the supernatural origin of civilization. The moral objection—for there *is* one—is that civilized man is already sufficiently disposed to set himself above his less fortunate brother. There is no necessity to teach a European planter, that he is a glazed pipkin of inspiration, which has oozed out through the leaky bottom of his slave.

The Sixth Lecture contains most useful dissertations on the origin and effects of the institution of property, and on the way in which individuals, in the pursuit of their own immediate objects, are made unintentionally to contribute to the service of the whole. The *anti-property* fallacy of Rousseau is effectually exposed; and the way opened for establishing the great practical truth of the present times,—that we want, not a division of property, but security for property. We are struggling against principalities and powers, whose trade and traffic it is to deprive us of our property by all the arts that fifty years' experience can suggest. We are wrestling with a many-headed Ikey Solomons; with the New Police of the Political Unions upon one side, and the venerable Charleys of an unreformed parliament upon the other. We want "chambers to be safe;" and not a new division of the lodgings.

The Seventh Lecture examines the effects of the progress of society in wealth, on public morals; and displays a marked antipathy for war. It is evident the archbishop does not believe in Montecuculi's "god of armies;" though he has no objection to noting the degree in which the advance in wealth has added to the military security of civilized communities.

'In the last place, you may observe what a security is afforded to a Community advanced in wealth, in the use of artillery, and the science of the engineer, against that most *demoralizing*, as well as otherwise frightful, calamity, the over-running of a civilized nation by hordes of Barbarians; which happened to the Roman empire, and led to that dismal and degraded period known by the name of the Dark

Ages. From the recurrence of precisely such an event, the civilized world is secured, through the arts connected with the use of gunpowder. These arts, as experience has shewn, have not rendered wars more frequent or more destructive; and though wars still occur, to the disgrace of rational Beings and of Christians, their ravages, frightful as they are, produce no effect comparable to the subjugation of a civilized nation by a tribe of Huns. It may be observed, however, in addition, that commerce between different nations, (which is both an effect and a cause of national wealth,) by making them *mutually dependent*, tends to lessen their disposition to go to war. Many wars have indeed been occasioned by commercial jealousy; but it will be found, that in almost every instance this has arisen, on one side, if not on both, from unsound views of Political Economy, which have occasioned the general interests of the community to a very great amount to be sacrificed for a much smaller advantage to a few individuals. The ruinous expensiveness also of war (which will never be adequately estimated till the spread of civilization shall have gained general admission for just views of Political Economy) would alone, if fairly computed, be almost sufficient to banish war from the earth.'

'On the whole, then, there seems every reason to believe, that, as a general rule, that advancement in National Prosperity which mankind are, by the Governor of the universe, adapted, and impelled, to promote, must be favourable to moral improvement. Still more does it appear evident, that such a conclusion must be *acceptable* to a pious and philanthropic mind. If it is not probable, still less is it desirable, that the Deity should have fitted and destined society to make a continual progress, impeded only by slothful and negligent habits, by war, rapine, and oppression, (in short, by violations of divine commands,) which progress inevitably tends towards a greater and greater moral corruption.'

'And yet there are some who appear not only to think, but to *wish* to think, that a condition but little removed from the savage state—one of ignorance, grossness, and poverty—unenlightened, semi-barbarous, and stationary, is the most favourable to virtue. You will meet with persons who will be even offended if you attempt to awaken them from their dreams about primitive rural simplicity, and to convince them that the spread of civilization, which, they must see, *has* a tendency to spread, does not tend to increase depravity. Supposing their notion true, it must at least, one would think, be a melancholy truth.'—*p.* 186.

'On the whole then, I think we may conclude, that the notions of those who consider a poor and imperfectly civilized community as possessing, cæteris paribus, superior or even equal advantages in point of moral improvement, are as much opposed to reason and to experience, as they are to every rational wish; and that as the Most High has evidently formed Society with a tendency to advancement in National Wealth, so, He has designed and fitted us, to advance, by means of that, in Virtue, and true Wisdom, and Happiness.'—*p.* 198.

In the Eighth Lecture there is the following passage on *Smugglers.*—

'An excessive multiplication of the latter class [*Smugglers*] is produced by the enactment of laws, whose object is, not revenue, but the exclusion of foreign productions for the supposed benefit of domestic industry. Whatever may be thought of the expediency of those laws, with a view to national wealth, all must agree, that the extension of smuggling must produce the most demoralizing effects.'—*p.* 207.

What a consideration for a spectator possessed of morals or good sense, that all this evil is incurred for the sake of robbing one man of a shilling to give it to another, and throwing a second shilling into the sea besides!

A common charge against manufactures is, that they contract the faculties of the labourer. One equally useful when occasion suits, is that the manufacturing labourers are too knowing. The manufacturers are the Helotes of society; but their day will some time come. Their difficulties and the remedies, are discussed at considerable extent in the Eighth Lecture.

The Lectures conclude with an intimation of more. The whole of what has yet issued from the Oxford Professorship is such as no person who pretends to reading or information should be without; and there can be no hesitation in looking forward with the expectation of equal value, to what is to succeed.

Among defects which might be corrected in another edition, may be mentioned, that there are too many attacks on foreign churches. There is neither Greek nor Roman, in political economy. It was wrong, to give to a sect what was meant for mankind; and the temptation should have been resisted, if it was only on the principle of not sacrificing the greater good for the less. The classical quotations also are too numerous, for readers who have not before their eyes the precise circumstances under which the Lectures were delivered. In page 174, line 16, there would appear to be a misprint in the word "neglect," which it is not easy to supply.

WESTMINSTER REVIEW, 1 January, 1832.

ART. VII.—1. *A Letter to Earl Grey on the subject of the Adjustment of the House of Peers.*—London. Ridgway. pp. 15.

2. *List of all the Members composing the House of Peers on Saturday Morning, October* 8, 1831; *shewing the manner in which they*

voted on the Reform Bill, as well as those who were absent from the Division; together with other Lists, illustrative of that Proceeding, and involving the future fate of the Measure.—London. Ridgway. pp. 28.

AS before this can be published, it may, or may not, be known what line of conduct the Whig ministers mean to pursue with relation to the House of Peers, it is necessary to write so as to meet any of the hypotheses that may be formed upon the ultimate event.

The facts displayed in the first of the Pamphlets noted, (and which are supported by Tables presenting the titles of all concerned,) are that on the Second Reading of the English Reform Bill in the House of Peers,

	AGAINST.	FOR.
'Of the Peers of the United Kingdom of creation antecedent to the conclusion of 1792, there voted .	79	81
Of the Peers of the United Kingdom of creation subsequent to 1792 (including the latest creations) .	66	66
Of the Archbishops and Bishops	21	2
Of the Representative Peers of Scotland	12	4
Of the Representative Peers of Ireland	19	4
Of the Royal Dukes	2	1
	199	158

'It appears, therefore,

1. *That among the old Peers of the United Kingdom there was a majority of two in favour of the Second Reading.*

2. *That among the new Peers of the United Kingdom* (including the creations under the present ministry up to the time of voting) *there was an exact balance; and consequently the creations made under the present ministry were precisely and to a unit the number required to balance the influence of the peculiar system under which the new Peers, or part of them, had been created.*

3. *That* (after adding the votes of the three Royal Dukes, which leave a majority of 1 in favour of the Second Reading) *the* 42 *votes which finally made the majority of* 41 *in the opposite direction, were the votes of*

21 *Bishops against* 2; *being above* 10 *to* 1,

12 *Scotch Peers against* 4; *being* 3 *to* 1.

19 *Irish Peers against* 4; *being nearly* 5 *to* 1.

The inference from the whole of which, is

That the people of England cannot have their Reform, *because it does not please the Bishops and the Scotch and Irish Peers.*

The question which consequently arises is, whether
First, the Bishops,
Secondly, the Scotch,
Thirdly, the Irish Peers,
are or are not in the category which demands,—not as an act of favour, but of fairness,—not in the character of a *coup d'état*, but as a portion of that every-day justice which the Sovereign is bound to execute on every day when the occasion may present itself,—their immediate neutralization by the exercise of the power lodged for that purpose by the constitution.'

'There are some powers lodged by the constitution which never have been exercised; from which a strong argument might be derived against their exercise at the present time. But this is not one of them, for it *has* been exercised, and exercised *one way*, viz. against the people. There is no reason therefore in the outset, why it should not in turn be exercised in their behalf.'

'And first, of the Bishops, it may be asked, whether as conscientious and honest men they will deny, that they or most of them are individuals picked for their zeal and talents by former ministers, to be placed in the House of Peers for the express purpose of upholding the system of those ministers by their votes whenever the occasion should arrive. It is not mentioned as matter of blame to them; the sin and duplicity would be, if it were possible it should be denied that they are the *élite* of the troops of former administrations, distinctly posted where they are, for the purpose of acting against the present. And if so,—is the country bound to submit a secular question to their votes, when the constitution has provided the moderate and perfectly pacific measure of neutralizing them by the introduction of new Peers?'

'Of the Representative Peers of Scotland a different view must be taken. It is not intended to deny, that they are a highly respectable, and even venerable, remnant of the feudal ages; possessing much of the interest attached to the relics of gone-by greatness, and the dignity of decay. It is not intended to assert, that, though they undoubtedly gratified their own inherent notions by falling in with the opportunity the borough system offered them, they were the creatures of the ministry for the time being, or are to be viewed in any light but as a race of faded territorial sovereigns, whom the progress of the times has happily deposed. But what it *is* intended to assert, is that the Peers of Scotland are not the men to settle an English question;—that they were not brought into the House of Peers for any such purpose, and that the mode and instrument through which the constitution provided against their being ever applied to such an end, was the authority lodged in the king to neutralize their power by making Peers in the event of the case arising. If at the period of the Union with Scotland, the question had been asked of the English people or government, "Do you then intend, if ever the sixteen Peers of Scotland or a majority of them should be opposed upon some English object, that the carrying of the English object shall be prevented by the Peers of

Scotland?"—the answer would instantly have been "No; there is a provision for such a case as that; there is the power of the King to make sixteen new Peers." Without an understanding of this kind, the Union with Scotland would have been totally impracticable and unreasonable; no man durst have proposed it, no man would have submitted to it; the existence of the Union is evidence of the existence of the right.'

'If it should be asked whether Peers will be created to support the Peers of Scotland in resistance to Scotch Reform; the answer is, that the necessity of Scotch Reform is conceded on all sides. The parallelism of the case is a *non est inventus*.'

'Of the Irish Representative Peers, the most moderate, conciliatory, and tranquillizing thing that can be done or said, is to point to their names and ask them whether it is not the boast and glory of the greater part of them, that they were selected for their personal merits and capabilities in support of one side of the great question now at issue; and whether they can in honour aver, that in this light they are fair referees for the English people, without an equal number being put in on the other side. It may, in the actual circumstances of a country, be avowedly proper and expedient that the decision of a question should be referred to the ancient magnates of the land. But it never can be fair, that it should be referred to a portion of them selected by the influence direct or indirect of one of the parties at issue, without the other party having the opportunity at all events to put in an equivalent. It would be like deciding by a jury where a known portion of the jurymen had been nominated, it matters not how many years ago, by one of the parties to the case. If this portion cannot be removed, let the other side put in an equal number in its turn; and then there will be a chance that the remainder, who were neither put in by one side nor the other, will effect a fair decision. But till this is done, it is plain that justice does not stand straight upon her legs.'

'This last operation with a jury, if a case can be conceived where there should be no other resource, is what in the metaphor that has been facetiously put forth, would be called *swamping* a jury. It is left to the common sense of mankind, whether the proper phrase would not be, that it was *bringing it to an even keel*.'

'The claim, therefore, on the part of the people of the portion of the United Kingdom called England, is for the immediate neutralization of the Spiritual, Scotch, and Irish Lords, by the creation of *forty-two* more Peers; and when this piece of naked, abstract justice has been performed, it will be time to debate the expediency or non-expediency of creating new Peers to carry a particular Bill if required. There can be no mistake. What is advanced is, that till this is done, the English people labour under a denial of justice; and that where justice ends, and not before, the question of expediency begins.'

'There is another claim, of smaller magnitude, but still of some; and that is, for an adjustment of the *promotions* in the Peerage since 1792. The balance sheet marked *C* in the Appendix, will show a

balance of 2 Marquesses to be raised to Dukes, 3 Earls to Marquesses, 5 Viscounts to Earls, and 3 Barons to Viscounts, due to the popular side. The people have therefore a right to expect, that promotion to this amount should be held over the heads of the peerage, as to be conferred *after* the passing of the Bill. If the peerage is inaccessible to considerations of this nature, there is no harm done; and if it is not, the people only claim a balance *in futuro,* for what has been bestowed on the other side already.'

'If the opponents of the Bill should represent, that it is a shocking thing to treat the rewards of eminent services as if they were cotton or tallow,—and if, (as in the persuasion that the result would be in their favour they would be likely enough to do,) they should demand that the honours attached to great names in the military, naval, legal, and diplomatic or civil lines of service should be struck out of the reckoning, the List marked *D* in the Appendix will show that the result would be to require the creation of one more Peer on the people's side, and in the promotions one Marquess to Duke *less* and two Viscounts to Earls and one Baron to Viscount *more;* a conclusion probably unexpected by either of the parties concerned,—and which might afford matter for meditation in various ways. It is evident that if the opponents push for this particular improvement, it will be conceded.'—*Letter to Earl Grey.*

The List referred to in the last paragraph, presents so remarkable and unexpected a result, that it is given entire in a note, for the meditation of all concerned. There will hardly be found an individual who would not have taken for granted, that under the circumstances of the fifty years' domination of the Tories, the Peers elevated since 1792 for services, or their representatives, would exhibit a decided majority in favour of their creators. And yet, mark the result; *the Peers elevated for services are against them.* Is it that the Tories can make Peers, but cannot keep them? The military and diplomatic names are evenly divided. The law Lords are all over to Tory. And the naval ones make the vessel finally heel to Whig*.

'No hurtful precedent can be derived from such an adjustment; any more than from that created by a legal award. The precedent cannot take place, without the previous circumstances being repeated; and if it does, it ought.'

'To resist such an adjustment on the ground of the inconvenience of increasing the number of the House of Peers,—would be a sacrifice of the greater interest to the less, like declining to take cognizance of a majority in the House, to save the trouble of writing down the names.'

* List of Peers of the United Kingdom elevated since 1792 for Military, Naval, Legal, and Diplomatic or Civil Services, who voted on the Second Read-

'If the reasonable, limited, and moderate demand for an Adjustment is not acceded to, the people of England must sit down under the consciousness that their Reform has been withheld because it displeased the Bishops and the Scotch and Irish Peers; and because the Whig ministry, for reasons known to itself, refused to go forward after being lifted to the top of the rampart on the shoulders of the people, and declined advising the exertion of the constitutional power provided for the case.'

'Why an administration which has hitherto led gallantly and been

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ing of the English Reform Bill; showing the effect of striking out their names on both sides.

IN THE MAJORITY.	Marq. to Duke.	Earl to Marq.	Visc. to Earl.	Baron to Visc.	IN THE MINORITY.	Marq. to Duke.	Earl to Marq.	Visc. to Earl.	Baron to Visc.
Wellington	1	1	1	1	†Anglesey		1		
Beresford				1	Lynedoch				
Combermere				1	Howden				
Hopetoun					Abercromby				
Harris					Lake				1
Howe			1	1	Nelson			1	1
Exmouth				1	Camperdown			1	1
Gambier					St. Vincent				1
					Hood				1
†Rosslyn			1	1	Mulgrave			1	1
Eldon			1	1	Anson (Lichfield)			1	1
Tenterden					De Saumarez				
Redesdale					Gardner				
Ellenborough					Barham				
Lyndhurst									
Stowell									
Wynford					Plunkett				
Manners					Alvanley				
					Brougham				
Sidmouth				1	Erskine				
Gordon (Lord Aberdeen)				1	Wellesley (Marquess)				
Melville				1	Grey			1	1
Bexley					Minto			1	1
Cowley					Goderich				1
Colchester					Granville				1
St. Helen's					Melbourne				
					Auckland				
Creations 23.					*Creations* 24.				
	1	1	4	10			1	6	11

Hence if it was agreed to strike out these names on both sides, the result would be to require the creation of one Peer more; and in the promotions, one Marquess to Duke less, and two Viscounts to Earls and one Baron to Viscount more.

† The Marquess of Anglesey and Earl of Rosslyn are Peers before 1792. Their promotions only are therefore counted.

gallantly followed, should in this manner turn round when all the enemy's defences are at its mercy,—is what, if the case happens, time will show, and posterity assuredly inquire.'—*Id.*

Even on the supposition of the most favourable event as respects the simple passing of the Reform Bill, two questions must ever remain subjects of equal wonder, till time the divulger shall explain the mystery;—First, if the Bill is finally carried *without* a creation of Peers, why the opportunity was lost of carrying it *with* one;—Secondly, if it is carried by means of a creation, why this did not take place before. A Peer should be in bottle a few weeks, before he is uncorked for use; and if any danger was really apprehended from the pique of the Peers at the increase of their order, no invention could have been hit on for increasing it, like bringing them up to the vote in the uncooled magnanimity of their wrath. No man ought to be forced to act when he is in a passion; patrician and plebeian infirmity have an equal claim on this point to humane consideration. Every person who has ever changed his mind, must be aware what a tissue of rooted firm resolves will ooze out in one night's communing with the friendly pillow; and how vastly the quantity may be increased, by the enlightening slumbers of a fortnight. In such a period as the last, human nature would have become reconciled to an increase of the Peers in the proportion of seven to six, and a consequent diminution of the dignity which depends on rarity, in the proportion of six to seven. A patient in a hospital is never expected to part with his limb without due space for making up his mind to the separation; and why should a man be desired to part with a seventh portion of himself in a hurry? The Peeresses too, are known to be conciliatory; it was wrong not to give time for their gentle counsels sweet. If it is the will of heaven, the Bill will undoubtedly be carried; but still it was a bad arrangement, that did not allow the Peers to cool their heads before they were called to walk on a razor's edge across the gulph that is before them. Nor is the wisdom of the course more intelligible, on the supposition that Reform is carried without creation. If Peers were not created, why were they not? What connexion is there, in common sense, between the possibility of the Bill's being carried *without*, and the policy of losing the opportunity of carrying it *with*? Just as well might a general say, "I preferred doing without; because, otherwise,—I should have had forty-two new pieces in battery for my after operations." There never was but one tangible reason urged against the creation of Peers, from the reforming side; and that came from

some of the more thorough-going of the Radicals, who said it would *popularize the House of Lords.* If Lords knew all that meant,—they would run to Earl Grey, as little boys do to the mother that whipt them, when they are afraid of the bull-beggar.

One of the most remarkable phænomena in political mechanics, is the length of time men will go on, propping a falling house on the wrong side. Let but the idea be started that this is the direction in which to apprehend danger, and it will be persevered in, as a cholera patient is denied a drop of water to cool his parched tongue. The House of Peers is unpopular with the country; that is to say, a large proportion of the inhabitants of the country have anything but friendly sentiments towards it as an aggregate. The fact is not made by speaking of it; the Lords themselves acknowledge it, complain of it. And the unpopularity is the consequence of their own acts,—on which, the question is not raised whether they are magnanimous and wise, but assertion made that they are unpopular. For example, when a member of the House of Peers declared in his place, that if he knew the writer who had given utterance to a certain political report, (that the Queen had exerted her influence against the Reform Bill,) he would kill him if he could before the next day,—a man not devoid of intelligence, nor wholly without the means of operating on others by example and precept, called together his children and charged them, if they should live to see the time when the conservation of the House of Lords should be a question which their votes or actions could in any way affect, to remember that their father had implored and besought them, by the weight of every recollection whereby he could act upon their conduct, not to assist in supporting a system of rule in which a man by virtue of hereditary right, and with no possible check from any nomination of the governed, could give official utterance to such a sentiment, for one hour longer than they would support the domination of the West Indian planters if they had been born negroes under their control. With this man, so far as he was a fraction of the population, it may be assumed that the House of Lords was unpopular. Anybody is at liberty to maintain, that such feelings are as dangerous, as the gunpowder placed under the House (if he did it) by Guy Faux; the present question is only, whether the gunpowder is there. The House of Peers, whether justly or unreasonably, whether heroically or in ignorance, has loaded and crammed its under stories with the gunpowder of popular dislike and indignation; and under these circumstances, the doubt of the men who love their

"order," the fear and apprehension of that portion of the aristocracy which possesses a hold on popular opinion, is whether they should expose the hereditary branch to the evils of admixture,—to the inconvenience of a crowded house, and the discredit of being elbowed by a king-and-people's Peer. The zeal of anybody on this point may be nascent rather than ungovernable; there are chances on one side as well as on the other; but the still small voice on the whole says, "Preserve the House of Peers." It may be mistaken, and the other course may turn out to be the best in the result; but at the present moment the balance of desire seems to be, that the minister would secure the House of Peers. With a great proportion of its members, the public has no distinct quarrel; and for many of them it has a personal, and what may perhaps please them more, a hereditary regard. It would be pity that the *laches* of the ministry, should ruin an institution needlessly. But everything depends on grace. There are fine chances on the other side; and if it be the will of heaven to withhold its gifts from the Lords, it remains only to hope it is for the sake of bestowing the more upon the rest of the community.

Among the inventions put forth by the enemy, one is, that there would be a difficulty in finding individuals to accept of seats in a House which has been so repeatedly recruited with creations of the Tories. It might be so; but it is a feeling which ought to be overcome. The Heralds' Office might do something towards removing it, by assigning some distinction which should prevent the new Peers from being ever confounded with any others. The date of the year in a conspicuous place upon their coats of arms, would make them perfectly secure in travelling with post horses, and prevent the slightest danger of being pelted on any race-course in the country. But the occasion for this difficulty altogether, as well as the suggested inconvenience of increasing the number of the Peers, are in the main only things of straw. To the List of the House of Peers in the second pamphlet mentioned in the head, is appended a list of twenty-five heirs apparent, and fifteen others standing in the line of succession, who might be created without any permanent augmentation of the Peerage. If these are not enough, or if any of them fail, new Peers might be recruited under the supposed stipulation with the Heralds' Office; and it is hard if the country cannot produce twenty land-owners, twenty owners of commercial or manufacturing property, ten lawyers, and ten generals or admirals, from whom the minister might select a cohort, that should not be afraid to speak with the Peers of the Pitt and Liverpool Administrations in the gate. Another list

demonstrates, that of the Lords Lieutenants of counties, *seventeen* voted for the Reform Bill, and *fifty-five* against. Such was the way the Tories had packed the counties for the approaching Armagedden; and it is to be a question whether a Whig ministry are to exert the countervailing power when they have it! If they do not, the thing they call the constitution is a cunningly devised fable, to let in mischief on the people, and keep none out. It may be all very silly; but if the game is to be played with Peers, let it be played fair. It is said just now, there are to be twenty-seven. But why are we to be defrauded of our *forty-two;* is it that the Whigs want a difficulty in the House of Lords to fall back upon? The theory that a creation would be followed by a defection to an equal amount, is another invention of the enemy. *Some* would probably fall off; but they would not balance those whom the display of serious intention to carry the Bill, would cause to fall off the other way.

The hypothesis which remains, is that ministers should act like sensible men who do not want to turn the country upside down, and make Peers. Why they did not do it before, must still remain a mystery. But if they make them, all that has been said is a justification of their course. If there is really to be what a noble lord is reported to have called a "tussle,"—if it is the determination of those that manage affairs, that nothing shall serve them but a new heaven and a new earth such as may arise out of making a chaos of the old,—there is no harm in praying that by the will of Providence and the guidance of all good angels, the morning stars may sing together at the birth of the prettiest republic that ever smiled on man. But, as Liston says, "It is quite optional;" they may keep the world in the old course if they like. If they do not, let the blame, with such as finally find fault, lie on those that cut the cable, or refused to lay down a new one when they might.

The new Bill has made its appearance. The Tory humanity has triumphed. They have saved their goose, and their chimney is to be swept with a couple of ducks instead.

The Bill has been read a Second time, and the numbers are 324 *for* the Bill. and 162 *against;* being exactly 2 to 1. The numbers on the Second Reading of the former Bill, were 367 *for*, and 231 *against;* being as 1·589 to 1. The relative majority on the new Second Reading is therefore to that on the old, as 1 to ·589; or as 17 to 10. The Whig aristocracy have shown talent, courage, honesty; and they will go on. *Vivent nos officiers!*

PROGRAMME to the WESTMINSTER REVIEW for April 1, 1832.

THE new Bill for Reform has passed the House of Commons, with an increase of 10 votes *for* and 3 *against*, above the numbers on the Third Reading of the previous Bill.

The Bill has also gone through one further stage, and been received with more show of reverence than was expected. If Mrs. Partington should be playing any trick now,—she will rue it when she feels the cold water ascending above her garters.

The Church had best act as in 1688. If she does, she will be a Church of uncommon fatness a century longer than she would without. The Radicals will "Open ranks and present arms" to the Bishops, if they will come in while there is any use in it. If they will not,

"Why then, with time, 't will turn into they would not."

Meanwhile the people waits upon Providence, which does all things for the best. If the Whigs break pledge, there will be new game to hunt. The Duke of Newcastle has sounded to horse, and it is quite time for everybody to be getting their hounds in order.

There has been an insurrection in Jamaica. The people of England had the same interest in it, as in any other military operation the result of which was to be to save them from a disgraceful tribute. Their allies had no military chance on this occasion, and have been put down. They have shown, however, great improvement in many respects. There used to be no hindering them, on any temporary success, from sawing in two the last reprobate that had whipped a pregnant woman to death, or executing "a wild kind of justice" on some of the ladies who had rubbed pepper into their children's eyes; but this time there has been none of it. They have conducted themselves like good men and Christians; and if the English people does not all fall together under the slave-drivers and borough-dealers, within six years they shall have a representative as black as soot, legislating for the colonies. It would be of great importance to get some military knowledge among these men. They would make excellent troops with a few non-commissioned officers from Haiti; and, if the enemy will only put his threats in execution, they will have to be regimented and led by British officers.

The people of Great Britain have behaved well on the subject of the Cholera; though saints and sinners have done their best to hinder it. There has been no panic, no howling. Two millions of property are said to have been destroyed by the quarantine which was forced upon the government for a pestilence which existed only in prophecy; and to this hour, by God's mercy it remains to be decided whether the season has not been an extraordinarily healthy one. Gyves and the tread-mill, were the proper punishment for prophets of this order; and there are thousands who but for the rebuke of him who said "Ye know not what manner of spirit ye are of," would think they did God service by smiting the blasphemer that cursed us by his filthy Baal, and held forth the Lord of heaven and earth as the pocket *gri-gri* of the borough-mongers, protector-general of their stolen goods accomplice after the fact by avenging the defunct dirtiness of Old Sarum. The Reform Bill must be the cure.

WESTMINSTER REVIEW, 1 April, 1832.

ART. I.—1. *Doctrine de Saint-Simon. Exposition. Première Année.* 1829.—Seconde Edition. Paris. Mesnier. 8vo. pp. 431.

2. *Religion Saint-Simonienne. Réunion Générale de la Famille. Séances des* 19 *et* 21 *novembre. Note sur le Mariage et le Divorce; Lue au Collége de la Religion Saint-Simonienne, le* 17 *octobre, par le Père Rodrigues.*—Paris. Éverat. 1831. *Broch.* pp. 64.

3. *The Social System: A Treatise on the Principle of Exchange.* By John Gray.—Edinburgh; Tait. London; Longman & Co. 8vo. pp. 374.

4. *Outline of the Rational System of Society, founded on demonstrable Facts developing the Constitution and Laws of Human Nature; Being the only Effectual Remedy for the Evils experienced by the Population of the World: the immediate adoption of which would tranquillize the present agitated state of Society, and relieve it from Moral and Physical Evil, by removing the Causes which produce them.* By Robert Owen.—London. Printed by Bradbury and Evans. *Sheet of 4to Post.*

5. *The British Co-operator.*—London. Virtue. *In Numbers.* pp. 24.

WHEN the inmates of a gallant vessel have been cast upon some desert island, and the shock of misfortune is over and hope begins to lay together the materials for deliverance, it is natural that each of the individuals in jeopardy should shape his plans according to the course in which from habit or education his ideas have previously flowed. A philosopher like him of the Abyssinian valley, in such circumstances would be attracted to the consideration of the facility, the speed, and the agreeableness, with which the lucky completion of his plan for cleaving the air with artificial wings would furnish to him the power of escape. Another might with equal truth and certainty dwell on the security, the satisfaction, and the comprehensiveness, with which a vessel for submarine navigation would land himself and all most dear to him on the shores of civilized men. A third might meditate a balloon; and a fourth contemplate the possibility of running down the trade-winds, tied, like the youthful Franklin, to a paper-kite. In the midst of all these, would stand up an order of gross and uninventive men, who would say "Let us build a schooner;" and the odds are greatly, that the schooner after all, shall be the destined instrument of salvation for the whole.

Not much unlike this, is in some respects the actual state of civilized mankind. The tempest has been long, and the struggle severe; ending in a state of temporary rest, which, after all, was but the consummation of misfortune,—the quiet of the shipwrecked mariner, who has leave to sleep because the powers

of the air have wrought their will upon his bark. The tale of those who have guided the interests of their fellow-men, is in good sooth far different from his, who on the gentle waters of Cockaigne invites the favouring winds from every quarter to which he may point his stern,—who sees rocks only to avoid them, and suspects shoals only to discover that he is on the other side,—who if he fights, is always all foresight, divine assistance, and rear-admiral,—whose shot never falls short, and whose bombs never fail to set fire to his enemies' capital in three parts at once. Their lot has fallen in less pleasant places, and they have not been of those of whom the psalmist said "They come in no misfortune like other folk, and they leave their substance to their babes." Nevertheless they in patience possess their souls; believing that though they be put to death, not a hair of their head shall perish. Well may their opponents call them "the eternal enemies;" for none have been so well drilled in the practice of despising present loss, and drawing for success upon futurity. At this moment their hopes are high. Though on the whole it may have been "*battu battant*," they have brought down some of the strong holds of their adversaries with a crash that augurs well for ultimate results. The Holy-Alliance lieutenants have been driven from France; and the great iniquity of all, in England is nodding to its fall. Honest men are much nearer "than when they believed," to seeing something like an experiment of the effects of governing in the interests of their own class, instead of their natural foes. A government of common-sense, for the bees and not for the drones, seems, in our own country, to be almost within reach. The "schooner" is afloat and away, and wants nothing but the word from the quarter-deck, to stretch out with every reasonable prospect of happy conclusion towards the promised land. All Europe gazes on the adventure; and most of all, the gallant men in France who a few short months ago gave the first impulse to the voyage, are rich in hope of the security and advantages of all kinds which will accrue to them from its success. Just at this moment it is, that in the two countries is heard the most prodigious outcry for all manner of substitutive remedies. The cause is clear; it arises from the general distress. No man should be blamed abstractedly, for wanting to escape in an air-balloon; the only blame is, when the attachment to the air-balloon distracts him from combining in more feasible operations.

The most extensive and magnificent of these counter-inventions, is "Saint-Simonianism." It has, or had, two chief priests and two newspapers. The Comte de Saint-Simon was born on

the 17th of April 1760, and lived till the 19th of May 1825. His family claimed to be descended from Charlemagne, through the Counts of Vermandois. The youthful Saint-Simon fancied that Charlemagne appeared and told him, that in addition to having produced a "grand monarque," his family was to have the glory of producing a "grand philosophe;" and in consequence he entered the army at the age of seventeen, and made his soldier-servant wake him every morning by calling out "Monsieur le Comte, gét up, you have great things to perform!*" The year afterwards, he went to America, where he served five campaigns. The military profession is stated to have been, to Saint-Simon, "a powerful apprenticeship for the part that God designed for him." It is not a bad one, for any man; particularly the dragoons, marches on horseback being favourable to meditation. Saint-Simon seems to have been proud of it; for he takes an opportunity in his works to call to mind the similarity of circumstances in the life of Descartes, who, he says, "was a soldier before he was a philosopher; he had been a fine fellow in the field, and he was venturesome in his philosophic labours." The Count, however, appears to have attended more to politics than tactics. He foresaw the changes which the revolution in America was likely to produce in Europe; but the speculation he formed touching the cause and cure, was marvellous. It was no other, than that the whole was the result of the progressive decay of the Catholic faith since Luther, and that the remedy was to be, the appearance of a new religion.

Of the thirty-four years which intervened between this time and the full developement of his "New Christianity," the Count employed seven in making money for his plan, seven more in collecting scientific materials for it, ten in composing a new system of philosophy, and ten a new system of politics; an orderly procedure as it is possible to propose, but which was not in all points attended with corresponding success. In 1790, he entered into some kind of "financial speculations," which probably mean banking,—and after the happiest success, he quarrelled with his partner, and got very little for his share. He went on, however, giving dinners and lending money to "savans" of all kinds, as long as he had any; and when he had no more left, he took to housekeeping "*seul avec la conscience de ce qu'il est;*" that is to say, with nobody to keep him com-

* LEVEZ-VOUS, MONSIEUR LE COMTE, VOUS AVEZ DE GRANDES CHOSES À FAIRE.'—*Exposition*, p. 63.

pany but the recollection of the soldier-servant and his morning calls. His first object after this, was to make a "*refonte*" of philosophy; or as the metaphor may be expressed in English, to put all of existing philosophy into a melting-pot, and turn it out in a new form. In 1803, Napoleon had demanded of the Institute an account of the progress of science since 1789. The Institute made such very middling [*médiocres*] answers, that the Count was obliged to write his "Introduction to the Scientific Performances of the 19th century." In this he showed the Institute, "that they had gone wrong from the moment they left Descartes and followed Newton;—that Descartes had established the monarchical principle in science, and Newton had turned it all into republicanism and anarchy;—that they were nothing but anarchical 'savans,' for they denied the existence and supremacy of a general theory*." And this the Saint-Simonians call "*profondément vrai, mais sévère*†."

The changes which the year 1814 brought with it, induced the Count to give up his scientific speculations for politics. For ten years he toiled after his manner, in trying to make the French operatives comprehend the new part the times called on them to perform. The operatives paid very little heed; no school, no party, could he form. Even the patience of Saint-Simon gave way, and he began, it is stated, like Moses, to wish the Lord would kill him out of hand. But it is no where said that Moses tried to shoot himself through the head; Saint-Simon, however, did, and fortunately escaped with a graze on the forehead. His hour, as is properly observed, was not yet come; he had not yet fulfilled all his servant had waked him for. It is precisely after making this bad shot, that—

'THE DIVINE MAN IS MANIFESTED, THE NEW CHRISTIANITY GIVEN TO THE WORLD!'

'MOSES has *promised* mankind *universal brotherhood*; [*quære* where? some think he rather intended a "peculiar people;"] JESUS CHRIST has *prepared* it; SAINT-SIMON *reduces it to practice*. At last the REALLY UNIVERSAL CHURCH is to begin; the reign of CÆSAR ends; a peaceful society takes place of the military one; from henceforward the UNIVERSAL CHURCH governs men's *temporal* affairs as it does their

* 'Il leur demande de revenir au point de vue de DESCARTES, qu'ils ont entièrement oublié pour celui de NEWTON. "DESCARTES avait monarchisé "la science, leur disait-il; NEWTON l'a républicanisée, il l'a anarchisée; vous "n'êtes que des savans anarchistes; vous niez l'existence, la suprématie de la "théorie générale." (*Lettres au bureau des Longitudes.*) On conçoit que ce langage profondément vrai, mais sévère, ne dut pas lui concilier la faveur des hommes peu philosophes auxquels il s'adressait. L'avenir le comprendra mieux.'—*Exposition*, p. 67.

It may be stated here once for all, that the quotations and translations given in the text and notes, are as closely as possible fac-similes of the original; the Italics and Capitals of various kinds being carefully preserved without alteration.

† "Profoundly true, but severe."

spiritual, the tribunal of *outward* law as of *inward* conscience. *Science is* [henceforth] *holy,* and *industry* is *holy,* for they enable men to improve the lot of the poorest class, and make them approach to GOD. *Priests, "savans," operatives,*—there you have the whole of society. *The chiefs of these priests, the chiefs of these "savans," the chiefs of these operatives,*—there you have the whole of government. And all *property* is *the property of the Church,* and every *profession* in life is a *religious office,* a *step* in the social hierarchy. To every man *according to his capacity ;* to every capacity *according to its works.* THE REIGN OF GOD ARRIVES ON EARTH. ALL THE PROPHECIES ARE FULFILLED.'

'SAINT-SIMON, now you may [lie in bed. No, the text is, may] die, FOR YOU HAVE PERFORMED GREAT THINGS!*'

Here is manifestly a sweeping plan ; nothing but that of the Fifth-Monarchy Men can be compared to it for boldness. But it is not new ; the reign of the saints on earth has been heard of before in many shapes, and there has never been any lack of volunteers to be members of the reigning family. Saint-Simon must be sifted ; for in these suspicious days it is not voluntary beggary, nor the peculiarity of taste which prefers being a "Divine Man" to being a French nobleman, that will enable a new church mendicant to ride rough-shod over the liberties of mankind.

There are to be torrents of industry, of operatives, of *savans,* and of priests. Moreover all these—that is, the living kinds—are to be endowed with chiefs. And the great end for which these chiefs rule,—as far, at least, as questions of property are concerned,—is that "every man may have according to his capacity, and every capacity according to its works." Does this mean his capacity for working,—for getting money and for keeping it ? If so, what is there that is new ? All this is what must be explained by degrees.

The "First Sitting" opens with complaints of the indocility and hobgoblin dread of despotism, which the events within the

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* '—; L'HOMME DIVIN SE MANIFESTE : LE NOUVEAU CHRISTIANISME EST DONNÉ AU MONDE !'

'MOÏSE a *promis* aux hommes la *fraternité universelle ;* JÉSUS-CHRIST l'a *préparée ;* SAINT-SIMON la *réalise.* Enfin l'ÉGLISE VRAIMENT UNIVERSELLE va naître ; le règne de CÉSAR cesse ; une société pacifique remplace la société militaire ; désormais l'ÉGLISE UNIVERSELLE gouverne le *temporel* comme le *spirituel,* le for *extérieur* comme le for *intérieur.* La *science est sainte,* l'*industrie* est *sainte,* car elles servent aux hommes à améliorer le sort de la classe la plus pauvre, à la rapprocher de DIEU. *Des prêtres, des savans, des industriels,* voilà toute la société. *Les chefs des prêtres, les chefs des savans, les chefs des industriels,* voilà tout le gouvernement. Et tout *bien* est *bien de l'Eglise,* et toute *profession* est une *fonction religieuse,* un *grade* dans la hiérarchie sociale. A chacun *selon sa capacité ;* à chaque capacité *selon ses œuvres.* LE RÈGNE DE DIEU ARRIVE SUR LA TERRE. TOUTES LES PROPHÉTIES SONT ACCOMPLIES.'

'SAINT-SIMON, maintenant tu peux mourir, CAR TU AS FAIT DE GRANDES CHOSES !'—*Exposition,* p. 70..

compass of existing human life have left among mankind*. As if it was anything wonderful, that after men have made so many efforts to escape out of the frying-pan, they should be afraid to jump into the fire. The Saint-Simonians resemble the *royalistes purs* in the innocence of their belief, that nothing but the stupidity of mankind in not allowing them to have everything their own way, is the cause of all the evil in the world.

The "law of developement of the human race," as "revealed to the genius of Saint-Simon," is that there are "two distinct and alternating states of society,"—one the "*organic*" state (meaning apparently the *organized*), where "all the results of human activity are classed, foreseen, and 'ordained' by a general theory, and the aim of the social action clearly defined;" the other, which is called (the reader will never guess why) the "*critical*," [*critique*], "in which all community of thought, all operation in union, all 'co-ordaining' is at an end, and society presents nothing but an agglomeration of insulated individuals struggling one against another." Each of these states, has occupied two periods in history. One "organic" state, (which must have been the golden age), preceded the æra of the Greeks which is commonly called the philosophic, but which the Saint-Simonians for more exactness describe as the first "critical." This was in time succeeded by a second "organic" state, which was no other than the palmy condition of the Catholic church till the 15th century, and which ceased at the instant when the Reformers gave the signal for the commencement of the second "critical" which has continued to the present day.

The "critical" epochs, like the ague, have two distinct periods; one, while the ancient "organic" order of things is being brought into hatred and finally destroyed, and the other, in the interval between the destruction of the old organic order and the establishment of the new. It is in one of this last kind of periods, that we are living in the year of grace 1832.

For proof of the extent to which the world is out of joint, the objects of human pursuits are divided into "science, industry, and the fine arts." All the direct leaders of science, it is stated, "are followers of the road which was opened at the end of the 16th century by Bacon. They heap up experiments, they dissect the whole of nature," &c. but who is there to class and arrange the disorderly collection? "If anybody were to ask what link connects the attraction of the heavenly bodies and the attraction of the particles in an individual body [the Saint-Simonians must have some secret

* 'Notre humeur indocile, notre haine ombrageuse, nous présentent incessamment le fantôme du despotisme.'—*Exposition*, p. 76.

upon this point], or by what general conception of the order of phænomena the learned regulate their researches on the nature of inanimate and animated matter, not only would such questions get no answer, but nobody seems to think of taking the trouble of looking for one*." Men, it appears, have begun at the wrong end; and instead of trying what they *could* discover, they should have formed a Saint-Simonian Institute to tell them what they *should* discover. The Saint-Simonian term is "co-ordain;" men have not discovered aright, because nobody would "co-ordain" for them beforehand. And "co-ordain" means to command. "The Academy does not COMMAND the progress of science; it is satisfied with ENREGISTERING it†." And the consequence of this absence of all regulation for telling a man where to prick for discovery, is that "the sciences offer the afflicting spectacle of anarchy complete."

On the subject of "Industry," the first notable observation communicated to the reader, is that the greater part of manufacturing establishments and machinery, are in the hands of people who do not know how to use them; and in particular, the foremen in general are very unfit for their places, and the stimulus of personal interest is not found sufficient to make them learn their business as they ought‡. The explanation of which may be suspected to be, that they would do it much better if they were appointed by a committee of Saint-Simonian chiefs. The owner of a work-shop has not sense to chuse his foremen; and there must be a Select Vestry to do it properly.

The "economists" (meaning either the French sect so called, or political economists in general, or probably both), are represented as having proposed to themselves the following problem; "Given a set of governors more ignorant than the governed, and supposing the object of these governors to be to cramp industry and injure the productive classes, what are the kind of regulations society ought to have?" This statement of the case would not be without wit, if it was directed, as some may surmise it is, against restrictions upon industry. But no; it is levelled against the principle of leaving men to themselves. It is stated in express terms, that though there may be a few monopolies and exclusive privileges, the greater part of them

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* p. 82.

† 'L'académie ne COMMANDE pas le progrès, elle se contente de l'ENREGISTRER.'—p. 85.

‡ 'En quelles mains, enfin, sont placés la plupart des ateliers et instrumens d'industrie? Sont-ils livrés aux hommes qui pourraient en tirer le meilleur parti possible, dans l'intérêt de la société? Assurément non. Ils sont, en général, manies par des gérans inhabiles, et l'on ne remarque pas jusqu'ici, que leur *intérêt personnel* ait conduit ces gérans à apprendre ce qu'ils devraient savoir.'—*Exposition*, p. 89.

have only a nominal existence, and that in matter of fact the liberty is great, and both France and England have given general scope to the principle of freedom of the economists. The quarrel therefore is not here. Where then is it? It is with this,—"That the industrious are left with no guide as to the quantity of consumption and production required, but their own personal observations. They hear a report that there is a fine opening in some particular branch of production, and there they throw themselves and their capital with their eyes shut, and without taking time to inquire into the proportion that is wanted; while the economists clap their hands at the idea that among these jostling interests the principle of *competition* will be applied on a broad scale, and the end is the success of a lucky few, and the ruin of the countless remainder*." And all this for want of a Saint-Simonian Select Vestry to communicate between the clothiers in the country and the tailors in the town, and by parity of reasoning between the said tailors and their customers, and inform each what quantity of waistcoat, coat, and pantaloon, will be wanted for the perfect convenience of the Saint-Simonian community. Some have thought that Exchanges and Cloth-Halls were something like a Vestry for this purpose; but then they were not Select. Every man was left to the dangerous responsibility of taking care of himself; and the tradesman on one side the way had not the benefit of the directions of the tradesman on the other, nor of the tradesman-Grand-Deputy to whom they might agree to refer the regulation of their purchases and sales. This may be a loss to the private tradesmen, but at all events it is a great loss to the Grand Deputy; the proof of which will be, the zeal with which each of the tradesmen will propose himself to fill the office.

And here it is impossible to maintain a staid countenance any longer, and not to break out into the assertion, that this is the shallowest plot ever begotten of human love of power on human imbecility. As if the one great lesson which the ex-

* 'Aujourd'hui, s'il règne quelques privilèges exclusifs, quelques monopoles, la plupart n'ont d'existence que dans les dispositions législatives. De fait la liberté est grande, et la maxime des économistes est appliquée généralement en France et en Angleterre. Eh bien! quel est le tableau que nous avons sous les yeux? chaque industriel, privé de guide, sans autre boussole que ses observations *personnelles*, toujours incomplètes, quelque étendues que soient ses relations, cherche à s'instruire des besoins de la consommation. Le bruit vient-il à circuler qu'une branche de production présente de belles chances? tous les efforts, tous les capitaux se dirigent vers elle, chacun se précipite en aveugle; on ne prend pas le temps de s'inquiéter de la mesure convenable, des limites nécessaires. Les économistes applaudissent à la vue de cette route encombrée, parce qu'au grand nombre des joûteurs ils reconnaissent que le principe de la *concurrence* va être largement appliqué. Hélas! que résulte-t-il de cette lutte à mort? Quelques heureux triomphent ...; mais c'est au prix de la ruine complète d'innombrables victimes.'—*Exposition*, p. 90.

perience of all ages has impressed upon mankind, the mighty moral which failure and misfortune in every direction have been whipping into the world since the creation, though it appears without ultimate success,—was not, that whoever has brains so unwashen as to give up the guidance of himself and his concerns to any man or collection of men, call it Pope, Papa, Priest, Parliament, or Parish-officer, in the confidence that they in their superior wisdom and prodigious virtue are to do better for him than he can compass for himself,—is as sure to be cheated as fatlings to be eaten,—that he is a human porker, and the true and only prototype, so far as he can go to make a multitude, for the brutal and insulting appellation it pleased a defender of abuses in the gone-by times to cast on the honest and suffering portion of his fellow-creatures. As if every page that has been turned over in human history had not stamped and authenticated the fact, that there is no way of securing even moderate attention to the interests of the mass, in those to whom imperious necessity makes it inevitable to entrust a portion of the community's affairs, but in exact proportion to the extent and incessant energetic operation that can be given to *two* processes, —First, the increasing the influence of the members of the club at large over their committee,—and Secondly, the diminution by all possible means of what shall be left to the committee at all. All attempts at the improvement of government lie in one of these directions. Representation and election are inventions to promote the first; *Constitutions* are an attempt to effect the second, by making a clear and definite statement of what the sovereign community, in the plenitude of its free will, has appointed a thing called a government to manage for it as its agent, and what it has not. The world thought it had got some way in these matters; but it appears the mistake has been, that it has not yet instituted the right sort of tyranny. All sorts are the right sort, for those who are to have and hold. No sort is the wrong one, for those who by any quantity of unctuous promises can coax themselves into the saddle. Folly is of all calibres, therefore there will be some to fit every borer. The periods following upon great and not very successful agitations, have always been favourable for *illuminati* of all kinds;—in half a century it is very likely the Saint-Simonians will have ceased to walk abroad in their doublets and hose, and be tamed down into as harmless and beneficent a sect as the Quakers. At present, however, they are manifestly in their ambitious and stirring stage, and put abroad their feelers in all directions for their game. As has been the charge against Mohammed, their Koran contains a little for all parties. The royalist is gratified by the admission, that all evil arises from the want of power;

and the republican is courted by the representation, that the only object is to do what he has attempted to perform. The churchman is invited by the assurance that the new state of society is to be all Church; and the *littérateur* is tempted by the prospect of a new heaven of science, in which every man is to bear an inverse ratio to his standing in the old establishment. In these circumstances it was not to be expected that there should be no attempt to rally the sinking prejudices of the working classes; and it is accordingly made, with a nakedness that goes far to defeat its own purpose. The celebrated principle of "Leave men to themselves," is stated to err through taking for granted, "that the interest of the individual is always in harmony with the interest of the community;" an assumption, it is added, which numberless facts prove to be untrue. Now it unfortunately happens that the assumption was never this, but the directly contrary; for it was always known, to all except the remnant of the Tories in the English Parliament, that the interest of each particular trader, in his individual capacity, was directly contrary to the interest of the community;—that it was his interest by any and all means to increase what he got for himself, without caring with what wasteful loss this might be attended to any other person, as really as (without necessity to push the parallel on the score of immorality) it is the interest of an individual highwayman to take the most he can upon his beat;—and what the unfortunates could never be made to understand, was that this might be literally exact, and yet it might be as true that all men could not gain by making forced gains from all, as that they could not gain by with one consent turning highwaymen, and trying to create public wealth by everybody robbing everybody on the high road. The Tories never could comprehend and never will—for when men comprehend it they must cease to be Tories—that though one man may gain by such a process, when all come to try it on one another a portion of the ill must be reflected on himself, which if there is anything like fair play, must swallow up all he possibly could gain, with the infliction of a portion of the wasteful loss besides, —and consequently one of the first objects of the institution of general government, is to save society from the evils which the undigested interests of its component parts would inflict upon the whole. "Leave men to themselves," meant leave them as they are left on the high road, to go any way they like except to rob their neighbour's garden. It meant leave them to themselves except where the welfare of the community necessitates restraint; and under this reservation the desire of all men to enjoy is the precise instrument, the very principle of universal gravitation towards the same point, by virtue of which, instead

of all things rushing to one common ruin, the circuit of the world is carried on, and the commercial cycle kept in continual gyration. Those who would see this eloquently displayed, can turn to no better place than the Archbishop of Dublin's book which was the subject of the first Article in the preceding Number of this Review*. There may they see how, in the language of the old Puritans, man's difficulty is God's opportunity; and the business of the supposed head-commissary in page 103, may be taken as the counterpart of what a Saint-Simonian committee will have to undertake.

But if the friends of the principle of "Leaving men to themselves," were far from assuming for it that the interest of the individual never attacked the interest of the community, they were equally far from resting it on the belief that the interest of the community never endangered the interest of an individual. The Saint-Simonians, therefore, take nothing by their appeal either to steam-engines or to printing, except the discredit of having condescended to enlist the rudest prejudices of ignorance on their side. They bring forward the venerable objection of the Turks to the printing-press, viz. that it throws out of employment the faculty of scribes; they next produce an insufficient answer,—insufficient as regards the principal assertion it is their object to bring forward, which is that the introduction of the printing-press is attended with the starving of thousands of scribes; and they wind up their argument with an intimation that they are in possession of the secret which, though they do not intend to prohibit the invention of machinery, is to prevent the mischief that might ensue. If this is not enlisting the prejudices of ignorance, they have been charged unjustly; and their own words are quoted below, that there may be no opportunity for judgment being given by mistake †. The answer to

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* See page 2 of the present Volume.

† 'La réponse à cette objection est connue; on cite l'imprimerie, par exemple, et l'on établit qu'elle occupe plus d'hommes aujoord'hui qu'il n'y avait de copistes avant son invention, puis l'on tire la conséquence, et l'on dit: *Donc tout finit par se niveler.* Admirable conclusion! Et, jusqu'à l'achèvement complet de ce nivellement, que ferons-nous de ces milliers d'hommes affamés? Nos raisonnemens les consoleront-ils? prendront-ils leur misère en patience, parce que les calculs statistiques prouveront que, dans un certain nombre d'années, ils auront du pain?'

'Assurément la mécanique n'a rien à voir ici, elle doit enfanter tout ce que son génie lui inspire; mais la prévoyance sociale doit faire en sorte que les conquêtes de l'*industrie* ne soient pas comme celles de la *guerre;* les chants funèbres ne doivent plus se mêler aux chants d'allégresse.'—*Exposition*, p. 91.

'The answer to this objection is well known; the case is quoted, for example, of printing, and we are told that it employs more individuals at the present moment, than there were copying scribes before it was invented, and then the argument is wound up with, "*So you see everything finds its level in the end.*" Wonderful conclusion! And till this level is completed, what are we to do with the thousands of individuals exposed to be starved? Will our fine reasoning be any comfort to them? Will they bear starving any better for knowing, that it

the objection that the invention of printing will be the starving of thousands of scribes, is not that they will have enough to eat some years afterwards, but that it will not cause thousands of scribes to be starved. Let it be calculated how many years intervened between the invention of printing and its making any serious inroad on the use of manuscript, and by what kind of advances it hung upon the rear of the retreating scribes; and then let rigid inquisition be made for a starved scribe, and produce him if you can. The truth is that the general employment for scribes would at first be reduced by a certain quantity; that this would make it less desirable than heretofore to bring up a boy to the business of a scribe, and act as a bounty for bringing him up to something else; that at the same time there would be an increased demand for persons to be employed, *imprimis* in printing, which is the new art that is to supersede the other, and secondly in all those other arts in which the demand will be increased by the expenditure of what is saved to the consumers of literature by the use of printing;—that from these causes there will arise a contemporaneous increase of demand for boys and men in other callings, which may be considered as nature's provision to meet the case; and of all this the result will be, not that thousands of scribes will be starved, but that there will be a gradual withdrawal of recruits, and in a certain degree of grown men also, from the business of a scribe, and a transfusion into some other, in the same manner as there has been a gradual withdrawal of wig-makers or their offspring from the business of a wig-maker, without any instance of the fields being found strewed as after a battle, with deceased perruquiers. That it was not a consummation the perruquiers would ever have thought of coveting, may be true. Most men have a leaning towards putting their children into their own calling, and find some advantage in so doing. Of this advantage the peruke-makers were undoubtedly deprived; but it is a complete exaggeration and totally beyond the fact, to say that peruke-makers were found starved by thousands in consequence of the world taking to wearing its own hair. There were probably not less than three or four millions of perukes made and daily kept in order at one period in Europe; yet nobody ever found a dead peruke-maker oftener than a dead rhinoceros. And the reason plainly is, that all men did not come

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can be decidedly proved by political economists, that in a certain number of years they will have something to eat?'

'Most certainly it is not intended by this to make any attack upon machinery; it has a right to give birth to all that the genius engaged in it can produce. But the foresight of the social body should take measures for preventing the conquests of industry from resembling those of war; there should be an end of mingling the dirge of mourning with the songs of joy.'

to the conclusion that wigs were nasty at once. The opinion insinuated itself by degrees; yet not so slowly as to count many years between the palmy state of wigs and their virtual extinction. Mr. Pitt's powder-tax gave the last blow to them that handled the puff and curling-tongs; yet even then, no cry arose to heaven, beyond a reported petition of the hair-dressers to the Prince of Wales, that he would be pleased to wear a wig. This is the course of things everywhere, when no artificial support has been given to the evil. Printing would not have penetrated into Turkey, faster than the disuse of perukes into Europe; and there would have been equally little reason to apprehend its strewing the earth with images of war. If indeed the folly or roguery of law-makers has dammed up the course of industry into an artificial channel, there may be strong reason why reform should imitate the processes of nature, and ensure some degree of graduality in the change. But all this was known, without calling Saint-Simonianism from the vasty deep, and will not be known the better afterwards. This part of the advertisement, therefore, acts only as a lure to the working classes, on a promise which will either be performed as anybody else would have performed it, or else be not performed at all.

In the chapter on "Beaux-Arts" the information is conveyed, that the first *époque organique* was Paganism up to the time of Socrates*. The two past "organic" epochs, therefore, are *Paganism* and *Catholicism*, while the two "critical" are *Greek Philosophy* and *Protestantism;* and the Saint-Simonians live in hope, of establishing a third "organic" epoch.

The chapter says very little of the "beaux-arts" but that they are "beaux." But it says that we are in an *époque critique;* that poets are no longer the law-givers of society; that the Americans made a bargain to supply the Turks with provisions, and gave no assistance to the republics of the South; and that they did not help the Haitians, to pay their ransom to the French. If some Americans sold to the Turks, there were others that gave to the Greeks; and it is not very long since all the *salons* of all the absolutists in Europe were in a pucker, at the declaration of the American President that he would not allow of interference with the South-American Republics. If one part of the Americans were jealous of Haiti, another estab-

* 'Nous avons dit plus haut ce qu'il fallait entendre par les mots *époques organiques, époques critiques;* nous avons dit que le *paganisme* jusqu'à SOCRATE, et le *christianisme* jusqu'à LUTHER, avaient formé deux états *organiques;* esquissons &c.'—*Exposition*, p. 95.

'In a former place was stated the meaning of *organic* and *critical epochs;* and it was said that *paganism* up to the time of SOCRATES, and *christianity* up to the time of LUTHER, had formed two *organic* states. Let us sketch &c.'

If the first organic state was ever defined before, it has not been observed.

lished a twenty-sixth State of free black men in Liberia. Moreover men make "*bons mariages*" when they can, and foolish ones when they cannot help it; all which the Saint-Simonians never mean to do. The inference from the whole of which may be understood to be, that things never will go right, till Select Vestries rule the world.

The "Second Sitting" begins with representing the pain it gave the sitters on the last occasion, to have to sketch the state to which "*criticism*"—the habit of criticizing, for so they explain it in the sequel*—has reduced the world. The altar has been profaned by the scandalous competition of different forms of worship† [*cultes*], and the fragments of the sceptre scattered among a thousand hands, as men after an action divide what the Germans call "plunder of battle." In short, there has not been the right tyranny anywhere. But they still have a hope, that the minds of their readers, "once disenchanted of that gazing-stock of liberty, in the name of which everything is held lawful," will see the true value of this "miserable *métaphysique*"—they really call it so—and on this they promise to proceed to expound "the doctrine which is to give the solution of the grand social problem." Whether they ever expound it, or whether they expound anything, is what every person must settle for himself. The following are the extracts among which it is presumable the exposition must be looked for. "Humanity," it has been declared by Saint-Simon, "is a collective being which is gradually developed; this being has grown greater from generation to generation, as an individual grows greater in the succession of the several ages of human life ‡." In the next place, "there are three grand secondary series, answering to the three modes of human activity, namely SENTIMENT, *intelligence*, and *worldly* [matérielle] *activity*§." They say they cannot enter into details of the developement of these three sets of qualities; but every man must do it for himself‖. And "this," it is declared, "is the law of perfectibility of human kind¶." Now it is plain there is no going on orderly with such matter as this; it is all "*hei mihi, beate Martine;*" it is what St. Paul would have called "wood, hay, stubble,"—such rubbish as men put forth for the mystification of such other men, as being conscious that what they understand is of little moment, are minded to try whether what they *do not* understand may be of greater value. Saint-Simon is transcen-

* '—époques *critiques*, dans lesquelles l'ordre ancien est *critiqué*, attaqué, détruit.'—p. 137. *l.* 23.

' — *critical* epochs, in which the ancient order of things is *criticized*, attacked, destroyed.'

† p. 105. *l.* 16. ‡ p. 107. *l.* 21. § p. 108. *l.* 15. ‖ p. 110. *l.* 25. ¶ p. 111. *l.* 18.

dental; it is simply that kind of nonsense of which nothing substantial can be made, the leaven which men incapable of better raise their dough withal, and puff up weaker brethren into an opinion that they have something in common stock. All wisdom is first simple, then easy; nobody ever found it in the midst of puzzle, or detected it among big swelling words that rumble on the ear and leave no impression on the mind. But there always will be men who will follow after the like. There is no help for it; they must only draw off to one side together, and form a millennium if they can.

The "Third Sitting" appears to consist entirely of the figure called rigmarole. The only thing worth noting in it, is the explanation of the term "critical," as applied to those alternating periods of evil, in one of which we now live. They are "critical," because in them the ancient order of things is "criticized*."

The object of the "Fourth Sitting" is to show, that there have been two different states in the world, a state of "antagonism" and a state of "association;" that antagonism is when men do not associate, and association is when men do not antagonize. The world is said, and rightly, to have grown much wiser upon these points; and association seems to be making great head against its adversary. Anthropophagy, slavery, and plebeianism, the Saint-Simonians represent as the decreasing terms of the series of human wrong. It would be unfair not to notice, that they say a good word for those Sir Francis Burdetts and Joseph Humes of antiquity, the Gracchi. The Catholic clergy are represented as having given the first outline of a society, in which the principle of setting one man to live upon another is in a state of complete exclusion.

The "Fifth Sitting" begins with a profession of faith, that "the world is advancing towards a unity of doctrine and of action;" and ends with asserting that the definitive object towards which the capacities of all mankind are to be made by Saint-Simon to converge, is "UNIVERSAL ASSOCIATION, THROUGH THE MEANS OF, AND WITH A VIEW TO, THE CONTINUALLY PROGRESSIVE AMELIORATION OF THE MORAL, PHYSICAL, AND INTELLECTUAL CONDITION OF THE HUMAN RACE†." There is no denying that this is a fine object; the description of it might be taken for a fragment of Mr. Owen. The only question is of how far anybody is going the way to compass it.

The "Sixth Sitting" opens out on the Saint-Simonians' plan for reducing the grand idea to act. The receiving of wages they declare to be "the latest form of slavery‡;" for as the man must

* p. 137. *l.* 23. † p. 171.

‡ 'Le rapport du maître avec le salarié est la dernière transformation qu'a subie l'esclavage.'—p. 175. *l.* 6.

either take his wages or starve, it is clearly servile to do the first. The moral maxim which declares that no man ought to be stricken with incapacity in consequence of his birth, they state to have been long since received into society; but they find it a shocking contradiction to this rule, that John hostler should be incapacitated by birth from putting his hand into the purse of Mr. Rothschild. They complain that this privilege is basely reserved for Mr. Rothschild junior. They think—they really say so—that the right of handling Mr. Rothschild's purse should in fairness be turn and turn about*. But instead of this, they say, the mass of working people is "*exploitée*"— a term of wide significance the Saint-Simonians are fond of—by the men whose property they make of use; the actual directors of the work undergo the same operation of "*exploitation*" by the proprietors, but in an incomparably less degree, and in return they are admitted to a share in the "*exploitation*" of the mass of the working classes, on whom the whole falls in the end†. The real workman, they aver, is, though with less intensity, "*exploité*" substantially, intellectually, and morally, as the slave was before him‡. It is quite clear, they say, that he has not the option of working or not as he likes; for if he does not like, he starves §. And all this the Saint-Simonians propose to mend.

It would seem to be a very simple truth, that a man must either be supported by working or be supported without it. But it is the experience of the world at large, that men cannot be supported without at all events *somebody* working, and that it is, in the opinion of most men, pleasanter not to work than to work, if they could have all without working that they could wish to have with it. To say that wise men love work, is a stupid fallacy. They love working with what work brings along with it;—they are fond of the pea with the shell, but they do not love the shells without the pease. Do the Saint-Simonians then intend to invent a state of things, where great lubbers are to be kept like Tories without working, or anybody else having worked for them? It is presumed, not; for one of their leading mottoes is, that every man is to have according to his works. In what way, then, have they got over the difficulty? If the Saint-Simonian lazy lout is to be left to starve for want of an order for meat and clothing from the Saint-Simonian committee,

* 'Il semble donc qu'il doive se faire aujourd'hui, entre les diverses classes de la société, un échange continuel des familles et des individus qui les composent, et que par suite de cette circulation, l'exploitation de l'homme par l'homme si elle se continue encore, soit flottante, au moins quant aux races sur lesquelles elle pèse.'—p. 175. *l.* 22.

The literal meaning of *exploiter* is "to work, as a mine, &c."

† p. 176. *l.* 2. ‡ p. 176. *l.* 20. § p. 175. *l.* 16.

wherein does he differ from the lout of every-day humanity, and what becomes of the complaint that a man must work or starve? This is a "cock-and-bull" story to attract the working classes, by promises which "with half an eye" may be seen to be impossible. Any reasonable propositions for amending the condition of the working classes, are what all men at this moment are eager to collect; and some think they are in a fair way of seeing some great improvement upon this head. But let us have no recruiting-serjeantry, no stories of mountains of beef and rivers of rum, and countries where young girls start up out of the ground, crying "Come eat me." Let us go on quietly and resolutely; and if man and officer do their duty, we shall see some strange things before we stop. But no tom-foolery to begin with; no Jack the Giant-killer's expectations of the impossible, which as they begin in falsehood must of necessity end in disappointment.

The Saint-Simonians go on to state, that "the ruling cause, the most immediate reason, of the '*exploitation*' of man by his fellow-creature, is the *constitution of property* as it at present stands, *the transmission of wealth by inheritance in the bosom of families**." Now let there be no mistake; this is not saying that the hereditary transmission of political power is a bad invention for the happiness of mankind, nor that laws or customs which enforce or encourage what is called "making an eldest son" are either bad or indifferent, nor does it touch upon the question (on which the French law has already gone beyond that of most other nations) of how far the society should make itself the instrument of executing a father's pleasure in respect of making any posthumous inequality among his children;—but it goes much farther than all this, it means to say that no man shall give what he has to his children at all, but to a *Saint-Simonian Select Vestry*, which is to decide upon the merits of little Tom and Harry, and give to each "according to his works." If little Tom is a good boy, the Select Vestry is to send him to Mr. Allgood as a clerk; and if Mr. Allgood reports well of him, the Select Vestry is to direct Mr. Allgood to make him his head-clerk and marry him to his daughter,—always recollecting that Mr. Allgood himself is to hold all he has to give, by warrant from the same Vestry or their sub-committee. And if Harry is a bad boy, the Select Vestry is to send him to sea, and he is to be eaten by wild beasts beginning at the stomach, as may be seen lively portrayed at large in the Spelling-book.

* '—l'exploitation de l'homme par son semblable....: nous allons l'observer dans le fait qui la domine, qui en est la raison la plus prochaine, la *constitution de la propriété*, la *transmission de la richesse par l'*HÉRITAGE *dans le sein des familles*.'—p. 178. *l.* 32.

The chain of argument by which it is proved that this ought to be, is as follows. "If the '*exploitation*' of one by another has received successive reductions since the beginning of the world; if 'sympathy' says that it ought to disappear entirely; 'if it is true' that mankind is advancing towards a state of things in which all men, without distinction of birth, will receive from society the education best calculated to give their faculties all the developement of which they may be capable, and will be classed according to their deserts with a view to being recompensed according to their works, it is clear that the present constitution of property must be changed, because, under it, men are born with the privilege of living without doing anything, 'that is to say, of living at the expense of other people,' which is in fact the same thing as keeping up the '*exploitation*' of one person by another. From one of these facts to the other, the inference is perfectly logical;"—therefore send little Tom and Harry to the Select Vestry. This is not an exaggeration; it is a literal translation of the Saint-Simonian logic, and the original is below to confront it with*. It is impossible to omit pointing out the total, complete, and unmeasured falsehood of the assertion, that the child who lives on what its father has given it, "lives at the expense of other people." If a man has honestly raised more corn than he can eat, either the corn is his own and he is at liberty to give it to whom he pleases, or it is not. If it is not, then the man is interfered with in the enjoyment of what he has honestly worked for; and if he allows the Saint-Simonian to take it from him without crushing him as he would any other kind of cockroach, it is nobody's fault but his own. And if a man has a right to his corn, he has a right to exchange it for beef, mutton, venison, pig, partridge, or Paganini, as likes him best; and to give an order to his sons and daughters, lawful or unlawful, or to anybody else of whatever stock and origin, for such part and share of those enjoyments as can be procured by any circuit of voluntary exchanges for the bushels of corn he shall be pleased so to deliver. If anybody says no, let there be fair warning, and he shall be fired

* 'Si l'on admet que l'exploitation de l'homme par l'homme s'est successivement affaiblie; si la sympathie prononce qu'elle doit disparaître entièrement; s'il est vrai que l'humanité s'achemine vers un état de choses dans lequel tous les hommes, *sans distinction de naissance*, recevront de la société l'éducation la plus capable de donner à leurs facultés tout le développement dont elles sont susceptibles, et seront classés par elle selon leurs mérites, pour être rétribués selon leurs œuvres, il est évident que la constitution de la propriété doit être changée, puisque, en vertu de cette constitution, des hommes naissent avec le privilége de vivre sans rien faire, c'est-à-dire de vivre aux dépens d'autrui, ce qui n'est autre chose que la prolongation de l'exploitation de l'homme par l'homme. De l'un de ces faits l'autre peut se déduire logiquement:'—*Exposition*, p. 179.

upon like any other thief. And if he comes with company, the neighbours shall be called in to assist, by simple beat of utilitarian drum, and proving to them that it is for the advancement of the general happiness that neighbours should agree to stand by each other in such circumstances. It may be no answer to a man to tell him he is a thief; but it is a very energetic answer, to tell him you can persuade the neighbours to treat him by the rule for thieves made and provided. He may go away saying he is an injured character; but till he can persuade the community at large that this is true, he will profit little. When the world is convinced their corn ought to be given to a Select Vestry, we must all be Saint-Simonians; but till then, there will be a hard fight before the Select Vestry gets anything but from such copyists of "brother Neile" as may be in the humour to give away.

But it is perhaps intended to be conceded, (with the exception of the influence which the Select Vestry is to possess over the whole conduct of its subordinates), that what is commonly called a man's own, he may dispose of during his life-time, but not afterwards. And this brings on the question, of why and to what extent the community acting with a view to the increase of the general happiness, should agree and undertake to support that kind of disposition of the property of an individual which is called *testamentary*. And here, if it be once allowed that it is for the greatest happiness that what a man obtains by his labour he shall enjoy as he deems best,—if it be conceded that no invention for setting up a Select Vestry or any other body to decide how much of every man's earnings he may lawfully expend on his back, how much on his stomach, and how much on education for his little boys, can in the end answer so well, in the double direction of regulation of expenditure and encouragement of industry, as is effected by the process of leaving every man to be a Vestry to himself,—if all this be conceded or can be proved, it appears to be a very little way further to the inference (whether it may have been a trodden path or not), that the right of testation (with all due reservation of after examination of the consequences in every possible direction) is, *primâ facie*, nothing but an extension of the simple right of disposition, to the doing in a convenient way what must otherwise be done in an inconvenient one. The Turkish Sultan (if popular notions are correct) claims the succession to the property of all who die, at least in certain ranks. The consequence of this must be, that a Pasha either bestows his wealth upon his children or others in trust for them before his death, in a way that is probably neither for their good nor his,—or that he risks being overtaken by the scimitar, and his children losing the pro-

perty altogether. No man can lift up his hand and say this is a good, or that it tends to good. It is obviously a trick, to give the Sultan all that may fall out between the difficulty of telling when a man may die, and the inconvenience of giving away what he has before he dies. There would be just as much sense and justice, in preventing a man from drawing a bill at a month. A testamentary bequest is only a bill payable at the end of the month the man shall die. The pretence that children would be better provided for by being taken care of by the community, is directly in the teeth of all experience and analogy. Are parish children so peculiarly well taken care of? It might absolutely be supposed that Select Vestries and parish officers, instead of being the objects of marked suspicion everywhere, had established to the universal satisfaction, that they were the only people to guide the guiders, and all honesty and discretion were emanations from their virtues. Why does a woman take care of her own child, and not volunteer her services as wet-nurse to the parish? Simply because the constitution of nature has given the attachment of one woman to one particular child, to be the general means of preservation for the whole. Why do not hen-sparrows sit on each other's eggs? The Saint-Simonians probably could tell why they ought. And the question is of the same nature, with respect to a *man's* taking care of his own.

The Saint-Simonian answer to this, consists in trying to confound the *use* of the right of testation with the *abuse*;—the part which men are interested in preserving, with the parts which they have from time to time been interested in cutting off. Men once transmitted slaves as part of their property (alas, there is no difficulty in finding where they do so still), and "the law, in civilized countries, has put a stop to this*;"—therefore it ought to put a stop to the transmission of a man's strong box. The habits, and in some sort the necessities, of barbarous and feudal life, originated the custom of transmitting the political power along with the wealth of the possessor, and of accumulating both these in the person of the eldest son. Civilized men have found their interest in breaking down this custom, and have consequently, in different degrees and forms, withdrawn or refused the protection of the community to bequests having this prejudicial tendency;—therefore they ought to withdraw the protection from all. The community has assigned various ways and circumstances under which salmon shall not lawfully be taken, all of them manifestly innovations on the practice of barbarous times;—the conclusion

* p. 181.

from which is, that salmon ought not to be taken at all. This is just as good a specimen as the other, of the mode of arguing from the regulation of a right to the abolition. The "Sixth Sitting" is principally occupied with the propounding of this particular sophism.

The "Seventh Sitting" professes to examine the comparative merits of the old and the proposed system, on the score of *utility;* which everybody must have seen long ago is where all the strength of the question lies, and that the rest is fiddle-faddle. The first charge against the old system is, that it does not favour *production* as it ought; by which, as stated once before, is meant that it leaves men to their own guidance, instead of that of a Select Vestry. They say that "for industry to arrive at the perfection it has a right to claim, it is necessary, first, that the instruments be distributed with reference to the wants of each local situation and each particular branch of industry; secondly, that they be distributed with a reference to the capacities of the receivers, in order that they may be put into the hands best able to employ them; thirdly, (which is the philosopher's stone, if they can find it), that the production be so contrived, that there shall never be reason to fear either want or glut in any of its branches*." And all these, they declare, are badly provided for by the present system.

The two first of these complaints depend upon establishing the superiority of the Select Vestry system over individual management; with special inclusion of the injustice of a successful manufacturer leaving his spinning-jennies to his children instead of to the Select Vestry as aforesaid. And they have the further weakness, that it is not proven that the just object is to effect the greatest quantity of production; the just object is to effect the greatest quantity of happiness. A West-Indian estate, with its apparatus of stocks and cow-skins, is a machine for effecting the greatest quantity of sugar; but it is not therefore an instance of a pattern principle. The third objection is founded on that compound of darkness and credulity, matchable only by the researches of the middle ages after the perpetual motion, which has no suspicion that, under any given circumstances it may be chosen to fix on, there must be a limit somewhere to what can possibly be produced. The limit may be one that is moveable to a certain extent by human exertion and ingenuity; but at any given moment there is a limit, and a limit to the extension of the limit. It is a limit of that kind which Malthus says exists to the breeding of sheep with little heads, which, though no man can show a head it is

* p. 191.

impossible to surpass in smallness, it may safely be affirmed will never be reduced to the size of the heads of rats,—and to the rearing of large anemones, which, though no man can affirm he has seen the largest possible, will never be extended to the magnitude of a cabbage*. No person is puzzled with such facts in common life; it is only when men undertake to philosophize without having provided themselves with any fitness for success, that such things start into difficulties. On no better foundation than this, have rested the follies that have been said and sung on the subject of human *perfectibility*. Man's *perfectation* is a flower that may be increased without the possibility of showing it in a state it cannot go beyond; but every dunce can show the cabbage it never will arrive at. Our well-meaning forefathers thought it a good joke to point to the cabbage, as an answer to what sensible men meant by perfectibility. The same kind of limit exists in the case of production; there is a limit to the extent to which men in the existing state of laws and circumstances can advance it, and there is a further limit to the extent to which any other laws and circumstances would enable them to increase it. In the instance of an island of a hundred acres, it is clear enough that with a given quantity of agricultural skill and of manure, only a certain number of families can be supported on the produce; and if the skill and the manure are increased, it is possible that the number may be doubled, and that it might afterwards be trebled, but it is plain that after the island is once well covered with good wheat, though no man can say it shall be impossible ever to obtain another bushel, the produce can never be increased a hundred-fold, still less a thousand. And the man who cannot see that this must equally be true of any larger quantity of land, is one who would never comprehend how if the addition of one mouth to ten in a starving boat's crew in the middle of the ocean would be a suffering, the addition of a hundred to a first-rate with a thousand men on board would be the same. There *are* such men, as everybody knows, who would run about delighting themselves with the idea that in such a vast space every one of the additional hundred would pick up something without any of the old crew being the worse for it, and who would despise and reject as "theory" whatever should maintain that the circumstances were the same. But this does not make the conclusion wise. If it be said that the island and the country may communicate with foreign parts, and exchange their industry abroad, this too is true; but it is also true that this also must have a limit. If

* Essay on Population. B. III. Ch. I.

the island should unexpectedly be discovered to be all compact of the richest commercial substances of which any example has been found in nature, there still must be a limit. It may be a long way off, but there must be a limit somewhere; and what is more, a sensible man will be assured of the reality and extent of the discovery at all, before he launches into any speculations on the removal of the limit. Prove that production can be increased, and everybody will be ready enough to do it. All men are in fact engaged in a struggle to increase production, as a swimmer struggles to increase his speed; and they find there is a limit. And then the swimmer is to be told, as the means of increasing his success, that it is perfectly within his own option to swim at the rate of a hundred miles an hour, and afterwards increase it to a thousand, if he will only let a Select Vestry tell him how. Want of employment and glut are not only the constant regulators of the production in different places and kinds, (though it is undoubtedly the interest of everybody that they should operate by as gentle and divided strokes as possible), but besides this, there is a perpetual tendency for the happiest state of industry to bring on a period when the excess of mouths above employment shall bring the felicity to a conclusion, as surely as the happiest state of human life is travelling towards death. It may be a very uneasy contemplation to the admirers of perfect happiness, and they may feel themselves strongly drawn out to search for the elixir of life that shall remove the evil. But the simple sad question still recurs, of whether the evil is removeable in the abstract at all; and whether the best way towards man's doing what he can, is not to study the nature of the final fact, as the means of discovering such palliatives and preservatives as the constitution of nature will admit. The fact that all states of production will at some time be followed by the appearance of more mouths than can find profitable employment, unless in the interim some start of improvement can be made in the extent of the resources from which this production is derived,—and that the sum of all these starts, though it may be an infinite series in point of number of terms, is, like the diminution of the sheep's heads, not infinite in amount*,—is the fatal fact which, whether

* No stronger instance can be given, of the bearing of mathematical science on Political Economy (which is in truth only mathematics applied to a particular use), than the constant recurrence of the principle, that the sum of an infinite number of additions is not necessarily infinite in amount. It will be infinite if the additions are all equal; but not necessarily if they are not. For example, it will not be infinite, if the additions successively diminish in any given proportion, though it were only by one per cent upon each other. It seems paradoxical, to those who have never thought of it, that a weight may be increased every day for ever, and yet never amount to an ounce. The fact, however, is, that no inference whatever can be made as to whether the amount will be great or small, till the nature of the additions is known. This is precisely

they consent to it or not, will for ever keep at bay the political alchymists, the gold-makers, who exhaust their genius in pursuing what there is no evidence to show that nature ever meant to be attained. All that is given to man, is to keep, as long as he can, a day's march ahead of the evil; but the evil is ever at his heels, and the distance by which he can keep himself in advance is all he will ever have to boast of. In any given state of things however promising, the principle which forms the greatest discovery of the present age, the principle which no man that objected to it ever stated fairly or ever understood, the principle of Population, will bring on a balance of the results with the efforts, as surely as the resistance of fluids in the ratio of the square of the velocity, will bring on a balance in the case of the swimmer. It is true that its discoverer stopped, like

> "him that left half-told
> The story of Cambuscan bold."

He appears to have thought its tendency was to persuade men to submit quietly to the cage whose existence he demonstrated; instead of viewing it as the discovery, which the moment the masses understand it sufficiently to ask *how there comes to be the cage*, will shatter the shackles of the commercial world, and make man walk upon this earth as if the thing belonged to him. But all this will come in time. The root of the present mistake is here. Men make corn grow by ploughing; the more men the more corn, if land be at their service without restriction, or even, to a certain extent, if their labour be applied in turning over more thoroughly the soil of a given field;—therefore on an island of a hundred acres, double the men must make double the wheat, and so on *ad infinitum*. This is a fair representation of what half that write on the interests of the working classes, cannot perceive to be untrue; and what is worse, they are apt to call men by all kinds of ill names, who see a little farther into the mill-stone than themselves. If they say "people may emigrate," then comes the fact that Emigration, though it be a valve, is just such a valve as may leave any imaginable pressure of misery according to circumstances. The supporters of the Corn Laws are the friends of an organized system of emigration. They consider it, (as a steam-engineer does his valve), as producing exactly that combination of safety and high pressure, which is most desirable for their purpose.

The arguments against competition [*concurrence*], contained in this Sitting, all finally come aground on this rock. Granting, for the occasion, that the Saint-Simonian Select Vestry shall

what in the House of Commons would be called "theory;" and political economists of name have fallen into mistakes for want of it.

answer in the best possible way for regulating the division of employment while there is enough for all, how will it proceed when this ceases to be the case? It must either give each a starving portion, which is what it does not calculate on; or it must leave those to get the best portion, who can best persuade other men to give them it, which is no removal from the present state of things. The truth is, the Saint-Simonian theory is in pursuit of what the eloquence of the British Parliament denominates "a mare's nest;" that is, it is based on the expectation of finding something which nature has not made and never will.

The introduction of Banking in the same Sitting, it is fair to state, is limited to what may be considered as the legitimate objects of that occupation, though in the present instance brought in aid of a baseless and impracticable theory. The French, with the exception of the period of "*assignats*" which cured itself, have not been very generally bitten with what may be properly called an English and Scottish mania. If, like ourselves, they have not made good use of the fact that any nation may without danger save itself the whole amount of the metallic coinage, by employing a paper limited to the quantity which will cause the note to purchase a certain standard quantity of gold,—they have at all events not fallen into the insanity of calling for issues of superfluous paper whose value is to be created by a corresponding sinking of the value of the currency at large in the pockets of the holders; nor the still greater unreasonableness of demanding that the gain, legitimate or illegitimate, from paper money, should be divided among such private persons as find it convenient to take it. Upon both these points, the Saint-Simonians have a right to claim the credit of having been "*sages, très-sages.*"

The "Eighth Sitting" opens with a passage which appears decisive, within certain limits at least, of the question whether the Saint-Simonians *regret* the inroads which "criticism" has made on the "organic" periods, or whether they meant merely to state that such things were. The tone of the book throughout had a strong tendency to bring the reader to an earlier decision; but any premature inference has been cautiously abstained from.

'During the three centuries it took to effect the destruction of social order as constituted in the middle ages, the steadiest defenders of the papal government and the feudal institutions have strongly felt the fact, that THE UNITY *of religion* and the HIERARCHY political or *military* once broken in upon, it was all over with a state of things they looked back on with affection. Their efforts have been useless: the institution of *nobility* is defunct; the *liberty of different modes of worship*

has been proclaimed. De Maistre, De la Mennais, De Montlosier, have nobly expressed their regrets and indignation; they have covered with their contempt this new form of society, stripped of either authority or faith, given up to indifference and anarchy, and widowed of its ancient memories; but their funeral chants, drowned by the shouts of the conquering party, have had no effect upon the masses, or if they have been heard, have excited nothing but anger and hatred. Some individuals have responded to them with warmth, and repeated them from conviction; but very few have been able to appreciate all there was that was great, and at the same time that was feeble, in these last sighs of the expiring middle age*.'

This seems conclusive. The Saint-Simonians are not the middle ages, but they will be as like them as they can. They are a reproduction of the old fallacy, "Give us all power, and you shall see how happy we will make you." It is only Jesuitism *en blouse*.

Passing this, the Eighth Sitting proceeds to observations on the opinions of everybody who has mentioned property. This big word "property," they say, has been put forward to mean very different things. It is quite true; the possessors of the Italian boy claimed his body as property as long as they could; the West-Indians do the same, with the bodies in their possession; but the serious question is, how many of these claims society will finally agree to support. A highwayman claims property in what he has taken on the high road; and the answer to his plea is, that society has been formed for the express purpose of supporting the claim of his opponents, and of knocking on the head such claims as his. This is precisely the answer which will be made to the slave-holders, when the time comes. The Saint-Simonians and they, unite, though for different purposes, in trying to mystify the difference between honest and dishonest property,—between such as society has combined to support, and such as it has combined to hunt down.

M. Say, and the political economists at large, are charged

* 'Pendant les trois siècles qui ont opéré la destruction de l'ordre social constitué au moyen âge, les plus fermes défenseurs du gouvernement papal et de la féodalité ont bien senti que L'UNITÉ *religieuse* et la HIÉRARCHIE politique ou *militaire* une fois entamées, c'en était fait d'un passé qu'ils chérissaient. Leurs efforts ont été vains: la *noblesse* est morte; *la liberté des cultes* est proclamée. De Maistre, De la Mennais, De Montlosier, ont exprimé noblement leurs regrets et leur indignation; ils ont couvert de leurs mépris cette société nouvelle, privée d'autorité et de foi, livrée à l'indifférence et à l'anarchie, veuve de ses antiques souvenirs; mais leurs chants funèbres, étouffés par les cris des vainqueurs, n'ont pas touché les masses, ou s'ils ont été entendus, ils n'ont excité que la colère et la haine. Quelques individus y ont répondu avec chaleur, les ont répétés avec conviction; mais bien peu ont su apprécier tout ce qu'il y avait de grand, et en même temps, de faible dans ces derniers soupirs du moyen âge expirant.'—*Exposition*, p. 214.

with speaking in general terms of the necessity of supporting the rights of property ; and are asked, whether they mean to blame Christianity for not respecting the claims of slavery and vassalage. The answer seems to be, that in the present state of society the claims of the robber and the slave-holder present so comparatively small an object, that political economists may be excused for overlooking them in the general term.

M. De Sismondi is accused of having done something, but not enough, to attack that principle of legislators, "which has always been for allowing people to keep in ease, what they have gained by toil*." The instances given, resolve themselves into his having opposed what may be assumed to have been the leading error of the French sect called the "économistes," the opinion that there was some extraordinary virtue or national profit, in that portion of production which goes into the form of rent; an opinion founded on the simple fallacy of overlooking, that all that goes into the pocket of the rent-owner, must come out of the pocket of somebody else.

Malthus and Ricardo are stated to have arrived at the conclusion, "that the difference in the qualities of land, permits a part of the produce of some, to be applied to other purposes than the maintenance of the cultivators." Passing over any error in this conclusion, whose ever it may be, which consists in representing the difference of qualities of land as the cause of the *existence* of rent, instead of being only the cause of the *differences* in its amount †,—they are blamed for coming hastily to the conclusion, that rent should be at the disposal of the

* '—l'opinion des législateurs, qui ont toujours voulu qu'on pût garder *dans le repos*, ce qu'on avait acquis *par le travail*.'—*Exposition*, p. 222. *l.* 18.

† If a man of six feet and another of five, wade through a ford of four feet, one will be two feet out of the water and the other one; but it would be a mistake to say their difference of heights was the cause of the primary phænomenon, which is the water's being four feet deep,—or that the water would not equally have been of this depth, if all the men in the world had been of the same height. This is the kind of mistake that has been made respecting the cause of rent. The consequences do not divide, till arriving at the question of *tithes*; and then the right set leads to the conclusion that the abolition of tithes would be a bonus to the landlords, and the other to the consumers. The community would look very foolish, if, by a miscalculation on this point, it should allow itself to be made to pay for the commutation of the tithe, and so put the amount into the pockets of the landlords.

It is well never to lose an opportunity of impressing this. Because there is a fallacy abroad, which consists in saying the two explanations have no essential difference. And it is peculiarly important at this time, when there appears to be a disposition to stir up the subject of Tithes. The clergy, who have among them men quite able to grapple with a question of political geometry, are interested above all others in understanding the real state of the case, and commuting a dangerous kind of property in a manner advantageous to all parties, on some plan like that proposed by the late Professor of Political Economy in the University of Oxford in his Letter to Lord Howick. It is to be hoped something of this kind in Ireland, is what ministers mean by "improving the condition of the clergy."

owner of the land. And here the debate must be cut short by coming at once to the question of utility, and asking whether in the cultivation of a new country, as for instance North America,—and all countries have been new at some time,—it would be politic and useful to say, "Cultivate your land as fast as you are able, but remember, the moment any of you succeeds in bringing a piece into a condition to pay any rent, the rent shall be taken from you by somebody else;" and whether, if this would be impolitic, there would ever come a season when it would be politic and useful to utter a similar announcement in a country,—and that includes all countries,—which had grown up under the preceding process. And the Saint-Simonians must not be allowed to entangle the question, with whether rent be a good subject for taxation,—or whether it be an enormity deserving to be abated by the pitchforks of the *posse comitatûs*, that the owners of rent should rob with a six-pounder on the high road by means of Corn Laws. The question is not either of these, but whether *honest* rent is to be left in the hands of the owner of the land, or is to be given to a Saint-Simonian committee that wants to have the disposal of it.

In their attack on "*Légistes et Publicistes*," the Saint-Simonians take imperfect definitions of "property" and "liberty," and then crow over their success in attacking them. Property they represent as being "the right of absolute disposition of certain things, *in any way not prohibited by law*;" and liberty, as "the right of doing anything *which the laws do not forbid*." Now both these are manifestly only lawyer's definitions. The real definition, both of property and liberty, is the right of unlimited disposition in all ways which *public utility*, or the promotion of the greatest happiness, does not prohibit; and law is only the limping agent, by which the public utility, *tant bien que mal* is professed to be promoted. And this brings the whole to the question of utility, or in other words, of the desirableness of Select Vestries.

The "Ninth Sitting" is on Education. All sects and parties look forward to education; some fairly, the most part unfairly. The Jesuits say, let us teach all men to be Jesuits from their cradles, and you shall see what merry Jesuits the world will be. The Church of England, or a substantial part of it, says the same. The question is a somewhat complicated one. Children must be taught *something*, before they can be taught reasons. A boy must be told to steal or not to steal, to lie or not to lie, before he is capable of judging for himself whether stealing and lying are for the general happiness. The fair conclusion perhaps is, that that is the best education, which is luckiest in instilling the greatest number of true truths *before* the scholar

is capable of judging for himself, and along with it the greatest capability for judging of truth for himself *afterwards*. "What is a good education," is therefore only a ramification of Pilate's question, "What is truth?" Hence there appears to be a general necessity for cutting off that part of an argument which says, "Our sect will be acknowledged the best of all sects, if you will only enable us to train up all the world to think so."

The "Tenth Sitting" continues the subject of Education. It discusses the relative merits of reason [*raisonnement*] and feeling [*sentiment*]*, as guides for the investigation of truth; and leans towards the latter. The juster conclusion would have been, that feeling and reason often go together, sometimes not; and that man, to please some incomprehensible power, has been placed as on an arena, to practise himself in bringing his feeling into subjection to his reason.

The "Eleventh Sitting" is a continuation of the same subject. The "Twelfth" is entitled, On Legislation. It speaks lightly of the institution of juries, as founded on mistrust of the magistracy †; and regrets *canonization, excommunication,* and *indulgences*, as gone by means of preserving order among the citizens ‡. It promises to enter on the theory of punishments, and "the organization of the body appointed to *apply* this theory to the different social actions §." The reader will take notice, that he has never arrived at the most important point of all, which is, who is to *make* the laws that somebody is to apply. He will probably have begun to suspect, that this is the mystery of mysteries, and to be curious to know who in the end will be found to have kept it for themselves. Repressive means are to be very gentle, &c., there are to be no *autos da fé* ‖; "but this is *not* it," we want the law-makers. All modifications in the divers codes that are to be, are to be made by "the individuals who are most capable of appreciating their justice and utility ¶." But how are the men to be determined? There may be more who think they have capacity, than can get into the legislative hall; and who is to strike the difference? A hint touching "counts and barons of industry **," intimates that they are to be "organized as a hierarchy according to merit;" but who is to settle the merit? The world stands on a tortoise; but what is the tortoise to stand on? Stick close to the question, and you will doubtless know in the end. Each division, as commune, village, town, or nation, is to have a "réglement d'ordre" [in English, a Book of Rules and Regu-

* p. 267. *l.* 28. † p. 307. *l.* 27. ‡ p. 308. *l.* 14. § p. 309. *l* 31, ‖ p. 310. *l.* 20. ¶ p. 322. *l.* 30. ** p. 324. *l.* 24.

lations] for industry, and a committee of "capable men" to cause it to be "observed or modified;" and "there you have the composition of the magistracy as regards industry *." Still, what is to be the mode of election of a "capable man?" Is it to be by the householders, or in the mode in which the Dutch in simple times are said to have elected a burgomaster! But "you are not to forget, gentlemen, that the future, on our plan, is to know nothing of those endless and hateful discussions about *property* †." Nevertheless, if anybody *will* quarrel, the committee is to be the arbitrator ‡. There are to be no disputes about widows or minors; because the committee of the "commune" ["commune" is pretty nearly French for parish; the parish committee,—we all know parish committees,] is to take care of them all, instead of leaving them to "the direct and so frequently blind provision, that might be made for them by individuals §," to wit their husbands and fathers. And "as there is to be no transmission of property, either during life or after death, but in the form of a bargain for time; all sales, disposals of interests, wills, transfers, pledges, mortgages, assignments, &c. are to be unknown ‖." This is to lead to "the disappearance of the whole cloud of keepers of records, attorneys, advocates, lawyers, and men of business, who are now continually employed in settling and keeping up those rights, which are all to be settled by an appeal to the arbitration of the 'heads of the industry department;' for since the distribution of all proceeds is to be in their hands, of course disputes about property can be carried no where else ¶." This is all. It is to be the republic of "*Mon Oncle Thomas;*" where all men were to be free and equal, but everything was to be done according to the directions of the Grand Regulator. Who is to be Grand Regulator here, is never settled; what the tortoise stands upon is never found.

It is almost lost words to say, that a boy of fifteen should be whipped and soundly, who had made such bad use of his opportunities of gaining knowledge, as to hold for eight-and-forty hours to a scheme so unlicked, so feeble, and so swept of everything like manly wisdom, (assuming honesty), as this. If it is *not* honest, then the case comes under the head of ring-dropping; which is a different category.

The Thirteenth, Fourteenth, Sixteenth, and Seventeenth "Sittings" introduce Religion. On which it is enough to state, and leave every man to decide on its truth by his experience,—that there never was but one class of men that needlessly

* p. 325. *l.* 11. † *Id. l.* 13. ‡ *Id. l.* 16. § *Id. l.* 24.
‖ *Id. l.* 27. ¶ p. 326. *l.* 1. *et seq.*

introduced religion as the instrument of settling men's temporal affairs, and but one other class that ever have submitted to it. The world wants *honest* lawgivers, not pious ones. If piety will make men honest, let them favour us with the honesty, and keep the piety for God and their own consciences. There never was a man that brought piety upon the board when honesty would do, without its being possible to trace a transfusion in the shape of money or money's worth, from his neighbour's pocket into his. The object of puzzling the question with religion is clear. You cannot quarrel for sixpences, with the man who is helping you the way to heaven. The man who wants your sixpences, therefore, assumes a religious phraseology, which is cant; and cant is fraud, and fraud is dishonesty, and the dishonest should have a mark set on them. There is no reason why measure should be kept with men, who stoop to call themselves "Father," and pick up the shabbiest falsehood in the sink of despotism, for the chance of persuading silly men and women to prove the paternity by making their ancestor their heir.

The Fifteenth "Sitting" is a digression on the work of M. Auguste Comte entitled "Third Part of the Working-man's Catechism."

The pamphlet next cited in the head of the Article, throws light on the Saint-Simonian ideas of government, as well as of what is announced as the particular subject. After date &c. it begins,

> "Our Father Enfantin said:
> "Dear Children," ....

Horns and a tail would not be more decisive to a frightened child at midnight, than such a beginning ought to be, to every man of common experience and good sense, of the character to be expected in the remainder of the thing that carries it. Nothing that is honest, ever before presented itself under such a formula; but there may be novelties under the sun. The "Father" begins, in a style evidently meant to be copied from the Christian scriptures, to inform his children that he had always told them a time of anarchy must come, and that it was needful for them to pass through it before they could arrive at what was perfect and complete. The authority under which they had lived hitherto, he tells them, was despotic. "*We* [which means *He*] had done much; but for all that, *power* is in what *is*, and not what *has been*; it is here, it is alive, it is before you *;" to wit, *Father Enfantin.*

* *Séance du samedi* 19 *novembre*, p. 2, *l.* 12.

He proceeds to recal the transactions of the last three years.

'When we founded the hierarchy, I *called* Bazard to partake with me the supreme authority.'

Father Enfantin, therefore, was the *fons et origo*. He was the Grand Regulator, the "*Oncle Thomas*."

'Bazard [the shabby fellow] asked for TIME to reflect; TIME! and so all our life was to be spent, in going to one and to the other.'

'From that time to this, it is I that have ORIGINATED all that has been *thought*, all that has been *done* in the way of the doctrine. I have ORIGINATED it in the face of the continual *opposition* of Bazard, of Bazard who was everlastingly demanding *time* for reflection.'

'The dogma was laid down [Father Enfantin is the dogma]; Bazard disputed it; and for all that, Bazard put it into shape, and in such a way as answered all the objections he had made to it himself.'

This is tolerably decisive of Father Enfantin's ideas of good government—Good government is, Father Enfantin. He goes on to complain, that Bazard had been busying himself with the July Revolution,—troubling himself, apparently, with good and bad forms of government,—instead of pushing the Saint-Simonian doctrine as he was desired. Enfantin and Bazard appear to have been two young cuckoos in one nest; and the public is introduced to the process by which "the elder and more terrible" proceeds to turn the other out.

Father Enfantin goes on to state, that "he has demonstrated by his labours ever since their commencement, that he and not Bazard was in position to call for Woman. All his works (he says) bore tokens of this desire. Bazard, on the contrary, said not a word about it. Bazard thought the times required male virtues*;" Enfantin wished to show a catholic spirit, and have the due proportion of female also. Man and Woman, he says, make a social individual; but "l'exploitation de la femme par l'homme existe encore, et c'est là ce qui constitue la nécessité de notre apostolat†."

Follows much, about the "problem of man and woman‡," and how the "êtres à affections profondes" would repulse the "êtres à affections vives" and *vice versâ*, if it was not for the mediating influence of the Priest §. Divorce is to be admitted, because it is necessary for the preservation of such individuals as are gifted with "l'amour progressif," which is defined to be

* 'J'avais, par mes travaux dans la doctrine, depuis le moment où s'était fait sentir à nos âmes la foi religieuse, indiqué que j'étais seul de nous deux en position d'appeler LA FEMME. Tous mes travaux portaient l'empreinte de ce désir. Bazard, au contraire, n'en parlait pas; Bazard pensait que la vie politique dans laquelle nous étions, et où nous continuions à marcher, était telle que nous avions surtout à développer parmi nous, et en face des hommes, des vertus MALES pour &c.'—*Séance du 19 novembre*, p. 4.

† p. 6. *l.* 5. ‡ p. 8. § p. 10.

loving first one and then another*. Divorce is consequently divided into three cases; viz. where the parties only agree in not loving one another; where both parties are respectively in love with somebody else; and where the necessity arises from only one of them being so affected †. The conclusion is, that Father Enfantin recommends there shall be "mariages successifs ‡," but "the limit, the time, the duration" [does "the limit" mean how many at once?] he says he must leave to the ladies to settle, and then hurries away from the question, as if he meant to intimate the rest was indecent.

But Father Enfantin has not the whole to himself; for on his saying that "he stands *alone* at the head of the doctrine" (meaning, apparently, that he stands without a woman to help him), Pierre Leroux "interrupts with vivacity." Pierre charges him with setting up a doctrine which has been rejected by the "collége," and says he shall withdraw. The Father answers by prosing about the difficulty of maintaining equality between men and women of "affections profondes" and men and women of "affections vives." A squabble ensues; in which others join on both sides. Father Enfantin, who was to bring the whole world into such orderly order, is tossed about on a sea of disputation. Many glimmerings of common-sense display themselves among his opponents, which only excite wonder by what malice of the dæmon such people came there. One speaker warns the women in the galleries against the Father, and the women in the galleries cry "*Oui, oui!*" He accuses the Father of having only told half. He replies, he has told it all to the "collége." The accusant says, he knows that, and he knows what it was, too. The Father replies, "that his theory was, that his ideas on woman were neither obligatory nor *to be practised* at the present moment, and that anybody who should attempt to *practise*, or lead others to practise, new notions on the relations of man and woman, would be no Saint-Simonian §." Subsequent disputants state the charges meant, to be promiscuous intercourse‖ and adultery¶. Father Enfantin protests against the possibility of his doctrine leading to adultery. He is told, that if he has no such thing as adultery, it is because he has made adultery the general rule**. The dispute is carried on through another Sitting. The dissidents retire; and Father Enfantin declares, that "as the means of realizing the liberty of the Saint-Simonian women, he shall begin by destroying the hierarchical distinctions which have heretofore existed among the women as well as men, and making them all return to a state of equality among themselves." It

* p. 12. *l.* 4. † p. 15. *l.* 19. ‡ p. 15. *l.* 32. § p. 37. *l.* 27.
‖ p. 41. *l.* 7. ¶ p. 42. *l.* 17. ** p. 42. *l.* 23.

is announced in large letters, that there are no more women in the hierarchy. The apostleship, is to be an apostleship of men. Man may be classed in ranks, because he has long been free as regards the woman; but woman may not be classed, "till herself shall have been revealed*." The Father takes an empty arm-chair, and puts it as a symbol that woman is not there †. Woman, he says, is "in a state of being called;" and by way of helping her, he turns her out. The dissidents are gone; and as may be conceived, the rest of the assembly conclude by crying "*Oui, oui!*" to everything that is said.

If the poor women are not "*exploitées*" here by Father Enfantin, there is no truth in man or woman. There can be no doubt that the political inequality of woman is a remnant of the barbarous state, which will be removed exactly as that state is receded from, and that a time will come when the equal rights of women will be made a powerful lever by somebody. But Father Enfantin is manifestly not the man.

Follows a "Note on Marriage and Divorce," by Father Rodrigues. It announces that a man is to have only one wife at a time; and is only to have many, one after another‡. It contains lucubrations on the nature of marriage, which are at all events needless. In all cases of this kind, a remote flavour —what a French cook calls a *soupçon*—of indelicacy is the charm. True delicacy is to *faire des enfans* and say no more about it. People like the Saint-Simonians, never think they can say enough. The case may be different in France; but in England every blockhead knows all that is necessary, without occasion to call a Vestry meeting.

If a naturalist were discussing the connexions of birds, it would be very strange if he did not remark, that their attachments last for a summer, which is the period demanded for bringing up their young. It is worthy of notice that the Saint-Simonians in all their discussions never once allude to the fact, that the well-being of the human progeny, prolonged as the case is by the succession of younger children, demands as imperiously, that in the biped without feathers the general rule should be attachment for life.

Finally, no further light is ever thrown on the mystery of the right of governing. The nearest that can be come to it, is that the mode of propagating a Father appears to be, that he is to be *called* by his predecessors. It is to be a government of the most cunning, modified by what the rest will bear.

The remaining subjects cited at the head of the Article, have bonds of connexion with the Saint-Simonian theories too strong

* p. 55. † p. 56. *l.* 10. ‡ p. 61. *l.* 4.

to be overlooked; though it is not denied, that good of various kinds may arise from their agitation, in the same manner as the alchymists were the instruments of turning out many useful discoveries. A state of activity, even though not altogether right, is better than one of torpor; the only very important evil the world is capable of, saving the impact of a comet, would be the arrival of one of the "organic epochs" of the Saint-Simonians.

The opinions of the Saint-Simonians are reproduced on this side of the Channel in an octavo volume by "John Gray;" with the addition of a new discovery, on "The Principle of Exchange." The principle resolves itself into a proposal that the government should issue a kind of billets or bank-notes to every person who chuses to lodge property in certain warehouses, and the billets are to be circulated as money. The effect of this, it is supposed, would be, to produce "a market ad infinitum*."

'Produce without any limit; call in the aid of magic, if you please, to increase the respective products of labour, and still the market can never be overstocked, nor can any difficulty be experienced in selling, for a fair price, that which you produce.'—*p.* 26.

The mistake is simply in believing, that such billets, when they came to be multiplied, would go on purchasing the same amount of commodities they were first given for. It is a repetition of the fallacy produced in one form by Pitt and Sinclair, and in another by those who call for the issue of Bank of England notes to anybody who will lodge property in return. There is such a thing as *depreciation;* which the moment the medium of whatever kind in circulation exceeds a certain amount, causes the value of all additions to its numerical volume to be swallowed up, by reducing the value of the whole circulating medium in the pockets of the holders, to the same value as before the increase. Suppose the proposed billets to have superseded all other kinds of circulating medium, and that forty millions of them are just sufficient to carry on the business of the country as at present. Let the number in circulation be made fifty millions, and the exchangeable value of each billet, —the quantity of beef and butter that will be to be had for it in the market,—will fall in exactly the proportion of four to five; and what will have been gained by that? Or in other words prices will rise, and the same quantity of things that used to be bought with four bits of dirty paper, will now be only to be bought with five. Any simpletons can make bits of paper legal tender, and declare that they are equal in public estimation to some-

* 'Social System, p. 17. & 1.'

thing else though they are passing for three-fourths of the value under their noses. But all the conjurors on earth cannot prevent the rise of prices which will make the increased number of bits of paper buy only the same quantity in the market as the old. Some have tried a *maximum*, which means everybody taking what they like ; but nobody liked it in the end except the thieves. If it is urged that the billets could not be depreciated, because on the first hint of depreciation, holders might have the commodities out of the national warehouse on demand, —the question arises, whether they are to have the the commodities at the old market prices or today's. If at the old, the plan will not go on a week without all the commodities in pledge being taken out, whereby the plan will be put into the category of things non-existent. If at today's, nobody will take the trouble of asking for the commodities, and so the depreciation will go on as stated. It is to be feared the plan is thus in the figure the ancients called a crocodile. If the representation was limited to saying that by substituting this paper-money to a certain amount, there might be a saving to somebody of all the gold that would be dispensed with as an instrument of circulation, this is nothing but what it has long been earnestly endeavoured to press upon the public. But it is not ; the representation is, that it would give us Fortunatus's wishing-cap. The subject of depreciation is a complicated one, and cannot be gone further into here, except by reference to the Article in the First Number of this Review*, where it has been treated of at large.

There are probably few schoolboys who have not at some time meditated on the prodigious convenience it would be, if the gingerbread-merchant would only take pebbles instead of halfpence, and if other shopkeepers would only agree to support him by taking them from one another in like manner. And it is likely there may have been considerable racking of youthful brains, to know why so promising a plan should not be immediately reduced to act. The reason is simply here,—*depreciation.* If the shopkeepers were to start with ever so virtuous a resolution to take each pebble for a halfpenny, they would find, that though they might persist in this, the art of man could not prevent ounce rolls from rising in price, first to two pebbles, then to four, then to eight, and finally to as tremendous a multitude as the farthings that were given for the horse that had eight nails in each shoe. Prices would rise, in fact, till all men

* The Article on the "Instrument of Exchange," from the Westminster Review for 1 January, 1825. (See Appendix). Republished with Additions appropriate to the period of republication. Addressed to the Fund-holders and the Labouring Classes. Second Edition, with corrections and additions. 1830.

became pebble merchants;—till cart-loads of gravel, and wheelbarrowfulls for small change, circulated in the community at something about the present market price of that commodity. The proposed bank-notes (if not allowed to be returned at the old prices) would go on in the same manner, till they settled at the value per waggon-load, which they might possess as old and by no means cleanly paper*.

Another of the same author's mistakes is so odd, that it is impossible to avoid noticing it.

'The whole science of political economy, or "how to make wealth," may be reduced to a simple receipt,—to one as plain as any in *The Cook's Oracle*. Thus,—Take due portions of land, labour, and capital, pound them well up together in a mortar, and the wealth is made. *Note*,—Capital is made of land and labour, so that your wealth never need be of insufficient quantity, until you have exhausted your stock of one of these two ingredients, provided your mortar be not too small.'

'The *mortar* is all that is wanted: at present, we have no mortar. See to it, ye politicians and &c.'—*p.* 197.

In this there is only the omission, that what comes out of the mortar must be as good as what was put in, and a little more to keep the pounder,—or else what is compounded is not wealth but poverty. The simple existence of this necessity, is what brings all this race of apothecaries to a stand-still.

The "Outline of the Rational System of Society" contains five "Fundamental Facts;" twenty dicta entitled "The Constitution and Laws of Human Nature, or Moral Science of

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* A passage in the treatise attributed on dubious authority to Plato under the title of the Eryxias, proves the agitation of a question of this nature at a very early period. Whether he was Plato or not, the wise old Greek who wrote it, (all the Greeks were old, and consequently wise), appears to have had a suspicion there was something he did not understand.

αὐτίκα γὰρ οὗτοι καρχηδόνιοι νομίσματι χρῶνται τοιῷδι. ἐν δερματίῳ μικρῷ ἀποδέδεται, ὅσοντι στατῆρος τὸ μέγεθος μάλιστα. ὅ, τι δέεστι τὸ ἐναποδεδεμένον, οὐδεὶς γινώσκει, εἰ μὴ οἱ ποιοῦντες. εἶτα κατεσφραγισμένῳ τούτῳ νομίζουσι. καὶ ὁ πλεῖστα τοιαῦτα κεκτημένος, οὗτος πλεῖστα δοκεῖ χρήματα κεκτῆσθαι. καὶ πλουσιώτατος εἶναι· εἰ δέ τις παρ' ἡμῖν πλεῖστα τοιαῦτα κεκτημένος εἴη, οὐδὲν ἂν μᾶλλον πλούσιος εἴη, ἢ εἰ ψήφους πολλὰς τῶν ἐκ τοῦ ὄρους ἔχοι.—Eryxias. *Plato Aldi.* II. p. 401.

'For, for instance, those Carthaginian people use a money of this kind. There is tied up in a little leather bag something most commonly about the size of a gold ounce; but what it is that is tied up in it, nobody knows except the doers. After which they seal it up, and pass it as money. And he that has the most of these, is held to have the most wealth and be the richest man. But if anybody with us had ever so many of such kind of things, he would not be a bit richer than if he had a number of the pebbles from the hill.'

It might be concluded from this, that the Carthaginians had a leather currency. The seal spoken of,—to make the thing feasible,—must have been the stamp of either a public or a private bank.

Man;" twelve "Conditions requisite for Human Happiness;" six heads of "The Science of Society, or Social State of Man;" a "Creed and Duties of the Religion of the System," in seven articles; two illustrations of the assertion that "A Rational Government will attend solely to the Happiness of the Governed;" twenty-nine clauses of "A General Constitution of Government, and Universal Code of Laws, derived from the Constitution and Laws of Human Nature," of which four are "On the Liberty of Mind or Conscience," three "On the Irresponsibility of Man," seven "On Providing for, and Educating the Population," six "On the General Arrangements for the Population," seven "On the Government of the Population, and Duties of the Council," and two (a brief allowance for a *nisi prius* lawyer) "On the Adjustment of Differences;" moreover four "Conclusions" and three "Concluding Remarks;" the whole on so much of a sheet of post paper as will leave room for directing it as a letter by the general post. Nineteen out of twenty of the statements contained in these different members, are so manifestly true, as to excite no feeling but one of wonder why they came there. It will be sufficient to notice such as present any possibility of dispute.

In Law of Human Nature No. IX, it is said that an individual must necessarily "become irrational" when he is made from infancy to receive as truths false notions; and can only "become rational" when the contrary. It must be assumed that by "irrational" and "rational" is meant reasoning "ill" and "well." In Law No. XIV, that "each individual's whole character, physical, mental, and moral, is formed independently of himself," appears to be too broad a statement; many individuals form great part of their own character themselves. The "Conditions requisite for Human Happiness" are not bad; people in general would be passably content with them. The heads of the "Science of Society" are all inexpugnable; saving always the question of where the knowledge is to be found. The "Creed and Duties" will not find favour with the lovers of "ceremonial worship," but are otherwise in the main good; with the exception of an apocryphal article at the end, which says that certain things may be done without chance of failure, by agreeing with the Rational System of Society—meaning the present sheet of post paper. The idea of the business of a "Rational Government" is very rational. Of the "Universal Code of Laws," Law No. VII is of questionable tenor. "No one shall be responsible for the feelings and convictions within him, and which are to him the truth, while they continue." It is to be feared within Bishop and Williams were "feelings

and convictions," that it was proper to *burke* the Italian boy.

The difficulty hitherto may have been small; but the next turn makes amends. Law No. VIII provides, that

'Every one shall be equally provided through life, with the best of every thing for human nature, by public arrangements; which arrangements shall give the best known direction to the industry and talents of every individual.'

This is manifestly the plan as before, of swimming first a hundred miles an hour, and then a thousand. It is an expectation founded on the neglect of all the opposing forces.

Law No. XV says, that under the Rational System of Society, after the children have been trained to it,

"there shall be no useless private property."

This enactment, when it comes to be put in force, will cause considerable anxiety in the City. It is oracular. Does it mean there shall be no private property of the kinds that nobody can use; or that there shall be none of that universally useless thing known by the name of private property? Reasonable doubts may arise on this. The language of legislation should be clear.

The next enactment says, that

'As soon as the members of these communities shall have been educated from infancy in a knowledge of the laws of their nature; trained to act in obedience to them; and surrounded by circumstances all in unison with them; there shall be no individual punishment or reward.'

This is the "Training" fallacy. Let us train everybody our way, and then everybody will do well. Everybody has been training everybody since the days of Solomon; the question therefore rests entirely on the proof, that the "Rational System" is the thing that will make everybody do well.

Society is not to be composed, as at present, of single families, but of communities of from three hundred to two thousand. As these communities increase in number, they are to be formed in tens, hundreds, thousands, &c. No description is given of how they are to *swarm*; for swarm they must, if they are never to exceed two thousand. Each of these communities, it is also enacted, "shall possess around it, land sufficient for the support, for ever, of all its members, even when it shall contain the maximum in number." It is not explained what is to be done next. Great improvements have been made in an operation upon cavalry horses in India; but it may be doubted whether they will ever be carried so far as to come within the Rational System of Human Happiness.

After all the community has been properly trained, the powers of government are to be exercised by all the members, male and female, between the ages of thirty-five and forty-five. Without debating the immediate application, it may be suspected that here is one of the alchymists' discoveries. It is manifest that as a modification of universal suffrage, the assigning of a term of *age* gives the power of striking a perfectly fair average through the whole of society, of any dimensions that may be found convenient. If there was any dispute about the proper time of life, this also might be settled by making *a great number* of proper times. For example, if all persons were to have a vote between the ages of twenty-one and twenty-two, thirty-one and thirty-two, forty-one and forty-two, and so on to the age of Methuselah if anybody reaches it,—the number would be a little more than half of that proposed by the "Rational System," and might be altered to any extent either way, by altering the length of the voting period here stated at a year. Such an arrangement would make an amalgamation of the different ages, as near to the proportion which would exist under universal suffrage, as can reasonably be desired. It is something to have discovered, that a system of fair universal representation is at all events perfectly easy as regards number.

Law No. XXVI is threatening to some people. Nobody that has been trained &c. is to be *punished*. But if they do not "think and act rationally," (that is, according to the Rational System), they are to be removed by the Council to "the Hospital for bodily, mental, or moral invalids;" which, of course means neither a gaol nor a mad-house. Common-sense, like love, though it be shut out at the door, is sure to fly in at the window;—it is what we must all come to.

By the clauses on the "Adjustment of Differences," if the general council shall ever attempt to contravene the laws of human nature, "which is scarcely possible," the elders of the community who have passed the council, are to call a general meeting of all the members of the association men and women above sixteen, and they "shall calmly and patiently investigate," and determine by a majority. And if the majority decides against the council, it is to be deposed, and the members who have passed the council and are under fifty years of age, and those who have not yet entered it and are above thirty, are to reign in its stead. What is to be done in case the new council behaves no better, is not distinctly stated; possibly there is to be a Restoration, and so on *toties quoties*. All other differences of any description, "if indeed it be possible for any to exist in these communities," are to be "immediately deter-

mined, and amicably adjusted," by the decision of a majority of the three senior members of the council.

The "Conclusions" and "Concluding Remarks" declare that the time is near at hand, and no human power can resist the change. The old system of ignorance and poverty is to be utterly destroyed; individual competition (apparently the Saint-Simonian "*concurrence*"), and national wars throughout the world, are to be rooted up.

'LECTURES explanatory of this New System will be delivered by ROBERT OWEN and his Disciples, on Sunday Mornings at Eleven, and Evenings at half-past Seven o'Clock, and on Wednesday Evenings at Eight o'Clock, at his Institution, Burton Street, Burton Crescent. The first Lecture on Sunday the Tenth day of April, 1831.'

Mr. Owen is quite right to pull the ass out of the ditch on Sundays if he can. There was no known exception either, against the man who should be mistaken in thinking there was an ass, or that he could pull it out.

The "Co-operative" System appears to embody most of the peculiarities of the "Rational," with some extension on particular points. The "Co-operatives" say that capitalists get rich; and so they desire to be capitalists. It is very fair they should do it if they can; but there still remains the question how. The fallacy that besets them is of this kind; and it is as well that honest men should know it. "Sir Robert Peel, from small beginnings, made (suppose) half a million by printed cottons; why then should not we make our own cottons, and divide the half million among ourselves?" This looks specious; but the answer is not far off. Suppose this successful manufacturer made half a million of money, in thirty years, by supplying on an average a million of customers; how much was this a-year from each? Arithmetic says, fourpence. If, therefore, the whole million customers were to form a Co-operative Society, they might save or gain fourpence a-year apiece on the article of printed cottons, *provided they could make them as successfully as Sir Robert Peel.* But what is the chance that they shall make them as successfully, or that they shall not make them by fourpence a-year worse? The reason why the great fortune was made by this particular manufacturer, was because in some way or other he contrived to make better, or cheaper, than all the world besides. But are the Co-operatives sure they shall make better, or cheaper, than all the world besides? Have they more opportunities of studying the secrets of cotton-printing, or of keeping them; and are their agents to display more skill and industry for their monthly pay, than anybody else will for the sake of making a fortune? The fact is the experi-

ment has been tried over and over, and it has universally been found that the private trader outstrips the agent of the company, as much as if the latter had to run with his society upon his back. It is portion of the old and well-established principle of the division of labour. The Co-operatives are not desired to admit the principle upon assertion; but it would be well that they should look into such evidence, as goes to prove it to be true.

Such are the principal counter-inventions now afloat in France and England. They show an excitement on the subject of property, which nothing but the diffusion of sound knowledge can turn to good. Let the rich men of the earth get the masses that know something, on their side,—or the masses that know nothing, will soon leave them nothing to do but to go to and howl, as the scripture advises them. It is time, too, that the friends of freedom in both countries should demonstrate to their enemies, that though novelty of any kind will be acceptable when good for anything, they do not depend upon novelty, but are ready to show them Marengo with the present pattern musquet, whenever the occasion shall arrive.

Since this was begun, the French government has committed the unwisdom of persecuting the Saint-Simonians. Persecution is always a bungler's craft, that in trying to stop one hole opens two. If they are made uncomfortable, let them come to England. They shall be received as reverentially, as they would be in Turkey.

POSTSCRIPT TO THE ARTICLE ON SAINT-SIMONIANISM, &c.

As the Number was on the point of publication, appeared "*An Address to the British Public, by the Saint-Simonian Missionaries.*" Effingham Wilson, Royal Exchange. pp. 36.

The Address makes an adroit use of the blunder of the *juste milieu* in endeavouring to rectify the Saint-Simonian doctrine by troops of horse and foot; and is published at a low price for dispersion. To such readers of this Review as feel interested in the subject, it would be a desirable accompaniment, for purposes of comparison.

WESTMINSTER REVIEW. 1 April, 1832.

ART. VIII.—1. *The True Theory of Rent, in opposition to Mr. Ricardo and others. Being "An Exposition of Fallacies on Rent, Tithes, &c."* By a Member of the University of Cambridge.—Second Edition. London. Hatchard. 1826. 8vo. pp. 64.

2. *Cours Complet d'Économie Politique Pratique.* Par Jean-Baptiste Say. Tome Quatrième.—Paris. Rapilly. 1829. 8vo.

3. *A Letter to Lord Howick, on a Legal Provision for the Irish Poor; Commutation of Tithes, and a Provision for the Irish Roman Catholic Clergy.* By Nassau William Senior, Esq.—Second Edition. London. Murray. 1831. pp. 104.—Third Edition. With a Preface. 1832.

THE above is a collection in order of date, of works bearing on a subject which the intention of the British government to interfere for "improving the condition of the Irish clergy," meaning thereby a commutation of the Tithes, has made of importance at the present moment.

The first question an intelligent spectator will demand to have settled before he decides on supporting any active measures, is "Out of whose pockets do the Tithes finally come?" or, to put it in a shape more germane to the actual circumstances, "If the claim to Tithes were at this moment abolished, into whose pockets would the advantage go?" For though it may be nakedly possible to frame a plan of commutation that shall have the appearance of sinking the question by leaving it in the same condition as before, it will be impossible to prevent the individuals who are called on for decision, from being swayed by their opinions on this particular point. He who believes the consumers would have the benefit, will, if he be a consistent person and above all if he be a land-owner, lean towards throwing any onus that may chance to be in dispute, on the consumers or on anybody except the owners of the land; while he who thinks the landlords would pocket the result, will as necessarily defend the interests of the consumers. And if the fact should be that a portion of advantage falls to both, there will be an equal necessity for distinct information, to all who desire not to determine in the dark.

It is great pity that political economists should ever be swayed by human passions, or look to the interests of kin and clan in the determination of their conclusions. They ought to be angels; but they are not. If, however, one school of economists has strenuously urged that Tithes were paid by the *consumers*, when the visible tendency of the dogma was to inflame popular discontent against the existing state of things,—the opposite party, who though not a whit inferior in zeal for popular interests always maintained that this was *not* the case, have a fair right to come forward now, when the tables are turned and the weight of popular interest is thrown on the other side. If it is true that *the landlords* are the men to whom the Tithes if abolished would revert, it would be a rueful jest if by any accident the landed legislators were to evince a zeal for an alteration in the system of Tithe, without a clear recognition that the amount would fall into their own purses

in the form of rent; and still worse, if they were to determine that *the people*, the consumers, were the persons who should pay.

It is pretty generally known, that what has been usually spoken of under the title of the Theory of Rent,—or for greater distinctness the Ricardo Theory, though there were several other claimants to the paternity,—was founded on the principle, that the *difference in the quality of soils* was the cause of Rent. Not, that it was the cause of the *differences in the magnitude* of rent, for this would never have been disputed; but that it was the cause of the existence of Rent at all, and that Rent would not have existed if all the land in the world had been of one unvarying quality, like the different beds in a citizen's kitchen-garden. Its supporters did not always say this in terms as distinct as these; for if they had, it would have been scarcely possible that their mistake should have gone unobserved either by themselves or others. But they evinced by their line of argument, that this was what they meant. They set up their discovery of the difference of quality of soils, as something distinct from the cause of rent which had long before been assigned by Adam Smith, namely that it was the consequence of *the limited quantity of the land.* Which is evidence that they did not mean simply that the different qualities were the cause of the *differences in the magnitude* of rent, a thing as palpably true on Smith's explanation as it could possibly be on theirs.

The publication cited in the Head under the title of the "True" or Adam Smith's "Theory of Rent," is the first that is known to have been distinctly directed to pointing out the error in the assignment of the cause, and tracing the steps by which it was wrought up into the production of erroneous results. The fault of the Ricardo Theory was shown to consist in mistaking an effect for a cause; as is thus stated in the extracts, where the text and the reply are given in juxta-position.

'Rent invariably proceeds from the employment of an additional quantity of labour with a proportionally less return.'—*Principles of Political Economy and Taxation. By David Ricardo, Esq.* p. 58.

'The aboriginal fallacy of the [Ricardo] Theory of Rent. An additional quantity of labour will be employed because prices have risen, which at the same time raises rents; and not rents rise because more labour is employed.'

'It is true, that on the best land, the same produce would still be obtained with the same labour as before, but its value would be enhanced in consequence of the di-

'The value of one man's produce is not enhanced because the returns obtained by another man in less favourable circumstances are smaller than his own; for the tendency of the latter individual's creating new produce at all, is to reduce the price of

minished returns obtained by those who employed fresh labour and stock on the less fertile land.'—*Ricardo.* p. 61.

produce, not increase it. But the price of all agricultural produce is first enhanced from an extrinsic cause, namely the increase of competition among the purchasers; and this enhancement makes it profitable for the last man to produce, in spite of the partial reaction created by the appearance of his new produce in the market.'

'The reason then, why raw produce rises in comparative value, is because more labour is employed in the production of the last portion obtained, and not because a rent is paid to the landlord.'—*Ricardo.* p. 62.

'Tokay does not rise in comparative value either because more labour is employed in the production of the last portion obtained, or because a rent is paid to the landlord. It rises in consequence of the increase of the demand for it, compared with the quantity that can be supplied; and *then* it becomes profitable to employ a certain quantity of additional labour in the production of a new portion of produce, and the rent is raised at the same time.'

'The value of corn is regulated by the quantity of labour bestowed on its production on that quality of land, or with that portion of capital, which pays no rent.'—*Ricardo.* p. 62.

'The value of corn is not regulated by this, but does itself regulate the quality of land, and the portion of capital, that can be brought into action with a profit.'

'The inverted proposition as given opposite, amounts to saying, that the price of corn is regulated by the cost for which it can be produced on the last quality of land, or with the last portion of capital, that can be brought into activity *with a living profit at the going price.* Or in other words, that the price is regulated by the price; which is reasoning in a circle.'

'Nothing is more common than to hear of the advantages which the land possesses over every other source of useful produce, on account of the surplus which it yields in the form of rent. Yet when land is most abundant, when most productive, and most fertile, it yields no rent; and it is only when its powers decay, and less is yielded in return for labour, that a share of the original produce of the more fertile portions is set apart for rent.'—*Ricardo.* p. 62.

'Among the properties here assigned as the causes of no rent, the property of abundance, or of unappropriated land not having begun to be scarce, is the only effective one. The rise in the price of agricultural produce, at one and the same time raises rent, and makes it practicable to cultivate land less fertile or whose powers have decayed. But there is no foundation for the inverted proposition, that it is only when the powers of land decay, that there will be rent. It is however quite true, that land possesses no advantages over other sources of useful produce on account of its yielding a rent; for all that is given to one, is taken from another. The overlooking this, appears to have been the error of the *Economistes.*'

'If air, water, the elasticity of steam, and the pressure of the atmosphere, were of various

'When air, water, &c. can be appropriated and the supply is limited in proportion to the demand, they *are* made the subject of rent;

qualities; if they could be appropriated, and each quality existed only in moderate abundance, they as well as the land would afford a rent, as successive qualities were brought into use.'—*Ricardo*. p. 63.

without any reference to the existence of various qualities. A gaoler who should take bribes for the luxury of breathing a freer atmosphere, would receive rent for air. And if a walk on the roof sold for half-a-crown, while putting the head out of window was only sixpence,—he would have been equally able to obtain the half-crown, if his gaol had happened to have no windows at all. It is the high price of fresh air altogether, that makes the window sell for sixpence; and not the window selling for sixpence that makes the roof sell for half-a-crown.'—*True Theory of Rent*. Second Edition. *p.* 20.

This is enough to show that as early as 1826, a resistance was begun to the Ricardo theory of rent, in the country where it had been originated. There is in general little profit in questions of priority; but in this case there is an accidental use. A proposition upon Tithes was founded on bringing forward Adam Smith's theory in contradiction to the other, and an examination of the English Corn Laws was moreover indirectly connected with it; and as the argument lay for a time under the disadvantage of contradicting a theory which it was held a kind of heresy to doubt, it has a right, when the tables are turned, to enjoy any influence it may claim with the public on the ground of having been original.

The answer made to the objections was, "that the difference was only in the expression, and there was none in the principle;" and, from another quarter, that it was only a "petty cavil." The answer in fact amounted to saying, that as long as the load is carried, it makes no difference whether the horse is held to move the cart, or the cart the horse;—that, in short, it is not worth quarrelling about, but is a cavil. Up to a certain point this may be true. It may be of no importance, till the consequences diverge. But it is possible to conceive a case where the consequences should diverge, and awfully; and that would be, if the question should ever arise, whether the way to increase the velocity of the progress, was to hook-on an additional horse, or an additional cart. It is presumable nobody would say it was a cavil then. In the same manner in the case of the two theories of rent, the object is to see, not where the consequences agree, but where they diverge. And it is remarkable, that the results from the two assigned causes never distinctly diverge, till arriving at the subject of Tithes; and then Adam Smith's explanation demonstrates that Tithes are taken out of the rents, while the followers of the Ricardo theory infer that they are paid by the consumers in the increased price of corn.

The followers of Ricardo prolonged and extended his mistake. As in the instances noted in the next extracts.

" Cost of production, then, regulates the exchangeable value of " commodities."

' This is only true in one direction. The exchangeable value of a commodity of ordinary consumption cannot long continue to be *less* than will pay the cost of production including the necessary profits; but it will be *more*, to an extent limited only by the circumstances of the particular case, whenever the competition increases the price faster than the outlay increases the produce.'

' If there is any truth in the account that has been given of the origin and progress of Rent, an immediate corollary from it is, *that taxes upon the land fall on the landlord.* For if the land-owner united the characters of landlord and cultivator by keeping the land in his own hands, the charge must fall upon him; and what he cannot keep himself, he can never recover from others by the invention of selling it to them with their eyes open.'

' If it is urged that such land-owners might recover the tax from the consumers, by raising the price of corn,—the answer is, that the operation of their individual interests will prevent it. If they raise the price of corn, it is manifest that less must be sold. A high price spins out the consumption of a deficient harvest, and would cause only a portion of the same magnitude to be consumed out of a plentiful one. But none of the land-owners would place so much confidence in the union among his brethren, as either to throw away corn already in his barns, when he had the option of selling it,—or to refuse to grow it, when by the sale of it he could obtain what he considers as a reasonable profit. The quantity of corn grown and sold, therefore, will not be diminished by any such combination; and if the quantity is not diminished, the price for which it is sold cannot be increased. If there was no monopoly gain, the case would be very different indeed. For then the tax would oblige the land-owners to contract their growth, till the price rose to what would pay them for their trouble; in the same manner as other producers do in similar circumstances. And the land-owners themselves will actually do this, with respect to that portion of their produce which will not pay them the necessary profits of stock.'

' If it is suggested that the landlord may raise the price by throwing the necessity upon the tenants, it is not difficult to see that the tenants will be equally unable to compass the end desired. To put the strongest case, let it be supposed that all the landlords resolve not to abate a fraction of rent on account of the tax, and that all the tenants have been previously bound by long leases which leave them no alternative but that of recovering the tax from the consumers or losing the amount. The tenant then, has made an improvident bargain by which he is likely to lose the amount of the tax for several years, unless it can be recovered from the consumers. But this will not produce in him any inclination to throw more away after it, either by omitting to sell corn which is in his barns, or by omitting to grow it

to the utmost that will pay him a living profit upon the last sum added to the outlay. The outlay and the produce will therefore be the same as if the land-owners had held the land in their own hands; and consequently, as before, the tax will not be recovered in the price. The tenants therefore must put up with the loss, till they have the opportunity of recurring to the fair competition between landlords and tenants, when the tax will be thrown upon the landlords; for it is impossible that any resolutions of the landlords should induce the tenants to go on accepting less than a living profit.'

'The way then to determine the effect of any tax or charge upon land or agricultural produce, is to see what the effects would be upon land-owners uniting the characters of landlord and cultivator, and what alterations would be made in the bargain which they would have to offer to the competition among tenants.'—*True Theory of Rent.* Second Edition. *p.* 32.

Here follow minute calculations, on the principle last enunciated, of the effects of Taxes on the Profits of manufacturers, on Wages, on sources of income in general, and on "the produce of the Land." The last is what leads to the question of Tithes, which it is the particular object to pursue. The statement of the followers of the Ricardo theory is as next given.

"A tax upon the produce of land, a tax upon corn, for example, "would raise the price of corn, *as of any other commodity.* It would "fall by consequence, neither upon the farmer, nor upon the landlord, "but upon the consumer. The farmer is situated *as any other capitalist,* "*or producer;* and we have seen sufficiently in what manner the tax "upon commodities is transferred from him that produces to him that "consumes."

'The first fallacy is in the conclusion of the preceding Section *that all commodities are alike* [that is, that there is no difference between those which are produced under a monopoly and those which are not]. The next is in the inference, that a tax on corn will raise the price *because it is a commodity.*'

'What follows is equally remote from being correct. The farmer is *not* situated as any other capitalist or producer; for he precisely differs from them in the capital point of having a monopoly gain at his back from which he may recover. To say that he is situated as any other capitalist or producer, is like saying that a man in a house on fire is situated as a man in a ship;—when the most notable fact about the whole case is, that one has a back-door by which he may escape, and the other has not.'

"The landlord is equally exempted. We have already seen that "there is a portion of the capital employed upon the land, the return "to which is sufficient to yield the ordinary profits of stock, and no "more. The price of produce must be sufficient to yield this profit, "*otherwise the capital would be withdrawn.*"

'The fallacy here is in the assumption that the tenants *can* raise the price of corn, to gratify either themselves or the landlords, and that capital cannot be withdrawn. The tenant must be indemnified

for the tax; but not out of the price of corn. A portion of capital *will* be withdrawn [as detailed in the preceding calculations before referred to]; though it will be a comparatively small one. So far is there from being any difficulty in capital being withdrawn, that it is what happens on every diminution of demand. The idea of there being any difficulty in its happening, may be referred to the opinion before mentioned, of the existence of an unalterable demand.'

"If a tax is imposed upon produce, and levied upon the cultivator, "*it follows that* the price of produce must rise sufficiently to refund the "tax. If the tax is 10 per cent or any other rate, upon the selling "price, corn must rise in value one tenth, or any other proportion."

'It follows that *something* must be altered. But it no more follows that it must be the price of produce, when it may also be the rent,—than it follows that because a man's brother is dead it is Thomas, when he had also a brother named John.'

'The real effects on the landlords and tenants, of a tax on agricultural produce, will, with the exception of a small reaction, be the same as those of a reduction of price of equal amount. To recur, for example, to the case stated before*,—If corn was at 44*s.*, and a tax was imposed of 4*s.* per quarter, the first approximation to the result would be, that the outlay would be reduced from 1010*l.* to 1000*l.*, the produce from 605 quarters to 600, the annual amount of profits from 101*l.* to 100*l.*, and the rent from 220*l.* to 100*l.* For it would be the same thing to the landholder both in his character of cultivator and landlord, whether a loss of 4*s.* per quarter was occasioned by a reduction of price or by a tax. But the effect of the tax will not be to cause a loss of precisely 4*s.* per quarter; for there will be a certain reaction on the price of corn in the way of increasing it, in consequence of the diminution of produce which arises from the tax and is represented in the particular case by five quarters. If on an estimate like those formerly entered into, the amount of this reaction might be stated at fourpence per quarter, the price of corn instead of 44*s.* would be 44*s.* 4*d.* And the effect of this would be in a small degree to increase the outlay, the amount of profits, and the produce. But the principal effect, neglecting inconsiderable fractions, would be that the price of the 600 quarters would be increased by fourpence a quarter, or 10*l.*; which will be added to the rent. The corrected rent therefore may be stated at 110*l.* A further correction might be made by calculating the effect of the small increase of produce last mentioned upon prices, and similar corrections might be extended to an indefinite number; but their amount would be insignificant. The tax therefore, with the exception of the reaction amounting to 10*l.*, is taken from the rent.'—*Id.* p. 42.

"Tithes are a tax upon the produce of the land; a tenth of the pro-"duce, perfectly or imperfectly collected."

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* In which it was supposed, that the land-holder unites the character of landlord and cultivator, and that the lowest price for which he and other cultivators are willing to advance capital and superintend its employment, is 10 per cent per annum. [p. 13].

" The operation, therefore, of this tax, has been already ascertained. "*It raises the price of produce, and falls wholly upon the consumer.*"

' That tithes are a tax upon the produce is clear. The consequence therefore will be, that with the exception of a small reaction, they will be taken from the rent; with certain small alterations in outlay, profits, and produce, as before stated. The truth of this or of the opposite representation, depends on the existence or non-existence of a fallacy in the Section entitled " A Tax on the Produce of the Land."—*Id.* p. 45.

It is plain that the locus of the error is in the assumption that a certain quantity of corn *must* be grown, and consequently if a tax be laid on the produce of the land, the price of corn *must* be raised to cover the tax, as otherwise the quantity required would not be grown;—to the entire overlooking of the fact, that in the case of all that is produced under a monopoly, or in other words, under circumstances where the limitation of the supply in proportion to the demand obliges the competitors to give more than is sufficient to replace the expense of production with the necessary profits, there is *another* source from which the tax may be obtained without a rise of price, to wit the rent,—and that the tax *will* be practically levied in this quarter, without either the tenant or the landlord having the power to prevent it by raising the price of corn. There will be a small withdrawal of capital in consequence of the tax, and a small increase in the price of corn in consequence of the small diminution of produce which will ensue; but with this trifling deduction, the tax, or tithe, will in the long run be levied on the rent.

The important point now left, is to endeavour, " nothing extenuating, nor setting down aught in malice," to calculate the effects that would arise on the supposition of the immediate declaration of the non-existence of Tithe; always understanding, as before, that it is done for the sake of the guide it presents for the formation of just opinions on questions connected with any kind of commutation.

' In opposition then to all these arguments, the conclusion is, that Tithes fall on the landlords, but have also a certain effect in preventing the cultivation of poor soils, and diminishing the outlay upon others.' [Which in return must cause a small reaction upon price, but one far short of throwing the tax on the consumers.]

' In England the waste lands have been estimated at a seventh of the whole. Hence if it may be assumed that the quality of this seventh varies uniformly, from that quality where the expenditure of a given sum will return enough to pay the expenses with the necessary profits and a ninth of all this besides for tithe, to that where it would produce nothing,—the abolition of tithes, in calling into cultivation all the land down to that which would return the expenses and profits without the tithe or furnish nine tenths of the

former lowest produce, would call into cultivation one tenth of the waste, and increase the quantity of cultivated land by one sixtieth. And if three quarters of corn per acre is a fair average produce for the whole of the cultivated land in the country, and one quarter per acre for the worst,—the produce of the new land called into cultivation by the abolition of tithes would be a hundred-and-eightieth part of what existed before*.'

'Again, the rents in England are supposed to be in the aggregate a third of the produce. Hence the case so often assumed as an example,—with corn at 55*s.*,—is not very far from an average case. And in it [as may be gathered from the terms of the last statement in p. 14], the diminution of produce consequent on the reduced outlay [on the land already cultivated] arising from a tax of one tenth or a tithe, would be [two quarters out of 609, or] less than the three-hundredth part†. Adding therefore this effect to the other, the whole diminution of produce effected by tithes in England, supposing them to be universal, may be estimated at less than the hundred-and-twelfth part.'—*Id.* Second Edition. p. 53.

What next follows is taken from a subsequent edition, and does not appear in the Second, which has hitherto been quoted for the purpose of establishing the date of its appearance.

'If a third part of the land is tithe-free (as is understood to be the case in England), one third must be deducted from the estimate of the effect of tithes. And the effect of the abolition of the other two-thirds would be, that the produce of the country would be increased by two-thirds of a hundred-and-twelfth part, or $\frac{1}{168}$; which, if it took place all at once, would cause the price of corn to fall by a quantity which, on account of the comparative smallness of the increase, would be at all events not very remote from the ratio of the increase, or, if corn is supposed at 56*s.*, fourpence a quarter. But this fall of price—(being in fact the "small reaction" mentioned under the heads of "Tithes" and "Taxes on the produce of the Land," and to which in those places also the same observation may be applied)—*will be only temporary.* And the reason of this is, the certainty that any given permanent alteration in the quantity of corn will ultimately produce a corresponding alteration in the population that is to consume it, and so bring back corn to the old price.'

'On the landlords in the aggregate, the first effect would be, that as fast as they could renew their agreements with the tenants, there would come into their hands *the value of the tithes as it stood before the abolition, diminished by the total value of the increase of produce*; which last (estimated at $\frac{1}{168}$ of the whole produce, while the tithe abolished is $\frac{2}{3}$ of $\frac{1}{10}$, or $\frac{1}{15}$) may be assumed to be $(\frac{1}{168} \times 15)$ about one eleventh of the value of the tithes. For as the [small] increase of produce is attended with an effect upon prices, not materially different from causing the increased quantity to sell for the same value as the old,—the full cost and value of this increase of produce, whatever it may be, must in the first instance [or within a trivial difference]

* This is what has been in another place called the "belt."

† This is what Dr. Chalmers *(See Note at the end of the Article)* p. 312, calls the "stratum."

be deducted from the rents that would otherwise have been obtained. But as the price of corn recovers from the fourpenny fall that has been inflicted on it, the landlords will gradually get possession, first of the missing eleventh of the tithes, and then of an addition of rents on account of the new land called into cultivation by the abolition. And as the rents of different portions of this new land will be of all magnitudes from a tenth of the produce down to nothing, half a tenth, or a twentieth of the whole increase of produce, may be considered as a fair estimate of the final increase of rents from this source.—If instead of the tithes being abolished all at once, the removal took place in different places one after another, results of the same import would ultimately be produced, only by imperceptible gradations.'

'If it is true that a given permanent increase or diminution in the quantity of corn will produce an effect upon population that will ultimately bring back the old price, an immediate consequence is, that the price of corn at this moment, is exactly the same as it would have been at this moment if tithes had never existed. The effect of the existing tithes, may be compared to the effect of a convulsion which at some period of remote antiquity should have sunk the hundred-and-sixty-eighth part of the land of the country into the sea. Britain would at this moment be a less Britain than would otherwise have been the case, by a hundred-and-sixty-eighth part of her territory, population, and everything else. But it will not be contended that there would at this moment be any increase in the price of corn, compared with what would have been the price if there had been no such convulsion at all.'

'The removal of tithes, therefore, would be a positive good, and there is no reason why sensible men should omit any measure for obtaining it. But the existence of tithes, so far as is connected with the price of corn, is not a positive evil; and therefore sensible men ought not to make an outcry as if it was. The real mischief of tithes is reducible to their being a mode of collection peculiarly calculated to generate ill will; and therefore one which the church should be at least as anxious to get rid of as anybody else. To which may be added, that they produce the same political effect as if at some remote period, an average hundred-and-sixty-eighth part of the territory of the country had been buried in the sea; and their removal by commutation or otherwise, would produce the same effect as if the like quantity of territory of average fertility were to rise out of the water.'

'The most extraordinary circumstance connected with Tithes is, that the landlords and the clergy do not find out, that there is a value approaching [in the end] to two-thirds of the hundred-and-twelfth part of the agricultural produce of the country,—(worth probably [at last] not less than 500,000*l.* per annum),—which might be called into existence; out of which something like half a tithe, or 25,000*l.* per annum, would accrue to the landlords in the shape of rent on land that now pays none, and might be divided between the landlords and the church, if they could only agree upon the terms. For this would be the [final] effect of a commutation of any kind,

which should prevent the ecclesiastical revenue from being raised, as at present, by a tax on produce. Two reasons only can be given, why something of this kind is not done. First, that the landlords and the clergy are not generally aware of the fact; Secondly, that they have an indistinct dread of alteration. If the church could could get over the dread, the landlords might. It is for the church therefore to consider, whether the contingent danger of increasing her revenues by the half of 25,000*l.* a year, balances the present evil of being held out to the community as living on the price of bread. Such a sum might not make much show, subdivided as it would be. But it proves that there is enough, to pay for greasing the wheels; and that it would be for the interest of the landlords everywhere, to allow the church to gain, and not lose, by the commutation. That the community at large would [finally] be benefited to the amount of 475,000*l.* per annum besides, ought also to be some reason; though the community at large are neither landlords nor clergymen*.'—*True Theory of Rent.* Seventh Edition. 1830.

The inference from all this must be, that the clergy if they are wise, will do all in their power to promote anything like a commutation while they may. There is no use in saying that the popular charges against Tithes have been over-rated. They may have been over-rated in some directions; but the truth is, that the mode of operation of tithes is one which produces an exasperation and a fretting evil, that are not measured by the absolute magnitude of the cause. If part of a horse's harness acts on him in such a manner as to keep up an excoriation and irritate him to unmanageableness, it is of no use to demonstrate to the quadruped that it is in reality but a fraction of the total weight of the machine that presses on the sore. The question is not one of mechanics, but of pain. It is true the horse has been told, that the whole cart was pressing on his *raw;* and this is not the case. Lord King admits it; and Lord King is a waggoner that drives a long team. But it does not follow that the clergy are a whit the safer, in insisting on riding on the shafts as they are. There is not a man of secular knowledges who ever felt his heart warmed towards ancient institutions while he drank *Floreat domus,* that does not counsel them to

* 'If a commutation of tithes were effected under legislative regulation, it would be necessary to give the landlord a power of continuing the tithe in its present form till the expiration of the existing lease, in cases where the landlord and tenant could not agree upon the sum to be added to the rent. For without this, the landlord would be exposed to the loss of the amount of the tithe during the unexpired period of the lease. At the same time it is presumable, that such a provision would in very few cases cause any practical delay in the execution of the desired commutation. For it would always be the interest of the landlord to carry the commutation into effect, provided he could make a fair agreement with the tenant; and it would be the interest of the tenant to offer one.—Whenever there is a commutation of tithes, it is not likely that the landlords will forget to secure themselves upon this point.'

get off in time. Nobody asks them to give up a farthing now. That contest is to come;—and would they be the worse prepared for it, for having had the wit to put themselves into the situation of substantial land-proprietors, instead of hated incumbents upon what will always be popularly viewed as the land of other people?

In 1829 M. Say took up the same ground on "Rent," and may be considered as having decided a doubt which constituted one of the few remaining *opprobria* of political mathematics *.

His conclusions are contained in the following Chapter, entitled "On an opinion that has been advanced on the subject of the profits of landed property."

'In the First and Third parts of this work it has been endeavoured to prove, that the exchangeable value of things rises in proportion to the want there is for them in consequence of the actual condition of the society concerned, without in ordinary cases exceeding the expenses of production of each article of produce. It has been shown how these expenses go to indemnify each of the persons concerned in the production, for his share in the effect; and to render these shares more distinctly visible, I have described the operative as producing by the application of his personal powers, the capitalist by the application of his peculiar instrument which is his capital, and the landed proprietor by the application of his, which is his right of property in a piece of land. And on coming to the estimation of the portion of the final results due to each of these several kinds of producers, it has been made by taking the quantity of recompense which each of them succeeds in making the others pay to him out the final result; for it seems very fair to conclude, that the value of the assistance which he clubs, is measurable by the expense which other men voluntarily go to, to procure it.'

'Such is, on the subject of this Chapter, the doctrine professed in the course of this work. It flows directly from that of Adam Smith, and is the only one, as far as I can see, that leads to applicable and practical results.'

'Some English writers, following in the steps of David Ricardo, an author whose services and talents it would nevertheless be wrong to overlook, have thought that Smith had not assigned the true causes of rent; that he had not found the laws which determine its amount, and did not know in what manner it is affected by the progress of society. I shall dwell a little on their doctrine on this point; but considering it as I do, as a mere abstract opinion which does not explain

* It is probably not hazarding much to say, that the only great *opprobrium* now left, is the question of Absenteeism. On which the state of the controversy is conceived to be, that the *Quarterly Review* (No. LXVI. Art. 8) demolished the reasoning of the original proposer, by demonstrating the omission of a step; but this did not show the proposition to be false, but only to be unproved. The Westminster Review (for 1 Jan. 1829, Art. 15) endeavoured to re-establish the defence on a new basis; and the question seems by general consent to lie over for quieter times.

practical facts and consequently is of no use*, I shall confine myself to tracing the principal arguments on which it is supported, and shall take them from the Notes which Mr. M'Culloch has added to the last edition of Adam Smith, in which I apprehend they are presented in their most compressed form.'

'Mr. M'Culloch thinks that the inequality of the expense of production attendant on the produce of different soils, *is the principal cause, and the measure, of rent.* He grounds his argument on the bad soil costing more for cultivation than the good, and on the necessity there is for cultivating the bad, to obtain the quantity of produce, as for instance corn, which the society is in want of.' ..

'In the first place, it does not seem very easy to tell, how a difference can be a real and effective cause. And in the next, who is there that does not see, that the products of agriculture have in this respect nothing that is not common to all other kinds of produce; and that in fact there is no product of human industry that, with relation to its cost of production, is not in precisely the same situation? The products of foreign commerce cost more, when they come from a greater distance; but is that the reason why more is gained upon those which have not so far to go? If the producers who are next at hand are not sufficient to supply the wants of the public, the price of the produce in request rises, and so becomes sufficient to pay the expense of bringing to market that which has to come from a greater distance. When an individual manufacturer happens to have some particular advantage, as for instance a favourable local situation, he gains more than those who are obliged to go to greater expense to fit their goods for market. Everything depends on the strength of the demand. It is so plain that this is the cause which carries the price of wheat to what it is, that Mr. M'Culloch himself says in express words, that *the value of corn has a tendency to rise with the* INCREASED DEMAND *occasioned by an increase of population.* [Vol. iv. p. 105].'

'Is not this conceding, that the price which furnishes a rent to the land-owner arises from the strength of the demand? Is it not agreeing with what is laid down in Adam Smith and the other parts of the present work? What new discovery is there in it at all? Can it be reasonably said, that the bad soils in a parish are the reason why the good ones give a profit? And is there any ground for announcing on the strength of this, that a discovery has been made of the real reason why land pays a rent, fee, or profit to the land-proprietor?'

'David Ricardo concedes in like manner, that it is the increase of the population, or in other words of the sum total of the public wants, which raises the price of corn to the height that makes it worth the farmer's while to agree to pay a rent †. His conclusion from this is, that "Corn is not high because a rent is paid, but a rent is paid because corn is high." The case is the same with all products, of whatever kind. At the price to which the wants of the public raise a yard

* As observed, there appears to be an oversight. The consequences diverge, on coming to the question where Tithe is taken from.

† Principles of Political Economy. ch. 2.

of cloth, this particular product has a value sufficient for indemnifying all concerned in the production. They are not paid from any necessity there is for paying the expenses of the previous production; for these expenses would not of themselves give any value to the product, if it had not an intrinsic use which caused it to be an object of desire.'

"No reduction," proceeds Ricardo, "would take place in the price of corn, although landlords should forego the whole of their rent." There is no doubt of this being true; because it is the strength of the demand which is the primary cause of value, and the abandonment of rents by the proprietors would have no effect upon the strength of the demand.'

'Ricardo tries to prove, in opposition to Smith, that rent is not a constituent part of the price of goods; but what he says does not prove it at all. If out of a quarter of corn at forty shillings, six shillings go to the land proprietor, the six shillings would still be included in the price, even though the six shillings were paid to somebody else in consequence of the land-proprietor's refusing to receive them.'

'Besides this, Adam Smith had said long before David Ricardo, that "*high or low rent is the effect of high or low price, and not the cause.*" [Book i. ch. 11.]. It is true that he says at the same time, that the case is different with the recompense of labour and stock; which he says are the cause of the price, and not the consequence. My own opinion is, that in this last part, Smith himself is in the wrong; the wants of the public, exactly as in the case of corn, are what are the cause of the price of products of whatever kind, and what enable a speculator to pay the recompense of the labour and the stock, and sometimes a share for the monopoly besides, when the monopoly is an essential part of the production, as is the case with the produce of the soil.'

'Mr. M'Culloch thinks that the principle on which he accounts for rent, is different from that which gives rise to the advantages of a monopoly; he admits that the owner of the land which produces Tokay, has a monopoly; and he admits that his advantage is limited only by the price to which the demand for Tokay makes the produce rise. It is very hard to discover any difference between the monopoly possessed by the proprietor of a corn-field, and the proprietor of the vineyard that produces Tokay, except that the last has much the smallest number of competitors. Whenever the proprietor is in condition to appropriate to himself the gain which arises from the employment of the land, he exercises a species of monopoly. When he can get nothing from his property beyond the wages of his own labour and the interest of his stock employed upon the land, his monopoly gives him nothing, and it is the consumer that has the benefit of the productive power of the soil.'

'The same author, aware probably of the odd effect of putting forward the bad soils as the cause of a profit being given by the good, affects to treat the objection to it as "a petty cavil," and produces the same idea again under a different formula. Out of the whole of the capital employed in raising corn, there is one portion, he says, which

yields no rent to the proprietor of the land [Vol. iv. *p.* 113], and this is what is the true foundation of the existence of rent. But this new formula is liable to the same objection as the other. Is it possible, that the *absence* of a profit in one case, can be a *cause* of profit in another?'

'It is but justice to Mr. Malthus to say, that he has seen into the weakness of this doctrine on rent, and has authenticated his opinion in a reply to a question before parliament. On being asked whether the bringing of new land into cultivation would not have the effect of raising the rents of the old, he replied, "The cultivating of poor lands is not the cause of the rise of rents; the rise of the price of produce compared with the costs of production, *which is the cause* of the rise of rents, takes place first, and then such rise induces the cultivation of the poorer land. That is the doctrine I originally stated, and I believe it to be true; it was altered by others afterwards.*"

'What has been said appears enough to justify my opinion on the so called theory of rent, which has introduced no new truth into the science of political economy, and explains no fact that is not explained more naturally by the truths that had been previously established. I shall not go into any further discussions on the subject, that I may not run further risk of incurring the reproach made against those which have hitherto taken place upon it, of being prodigiously tiresome, and disgusting numbers with a study which is otherwise so attractive by its application to, and influence on, the lot of human kind. Who can calculate, for example, the immense consequences of that one principle so clearly established since the time of Adam Smith, and now adopted by all competent judges of the subject, that every nation and every individual has a distinct interest in the prosperity of all the rest, and that jealousies are only the result of ignorance? or how much good is destined to arise out of the demonstration, that a fall in the value of produce is tantamount to a positive augmentation of national wealth?'—*Say.* Vol. iv. ch. 20.

Here is a great step gained, or more properly two great steps; First, that irresistible light is thrown on the nature of *monopoly produce;* Secondly, that there is shown to be nothing in this kind of production that is confined to particular articles, but all kinds of production are capable of taking place, and actually do in various instances take place, under circumstances of monopoly. It is two great New-Found-Lands, charted and laid down.

It remains to produce the conclusions and inferences of the Oxford Professor; who among the moderns, must be considered as being, in point of success, at the head of what may be denominated the *readable* school of Political Economy. After mentioning the proposition of Dr. Doyle, "that the tithing system should be utterly and for ever abolished, and that a land-tax, not exceeding one-tenth of the value [? of the annual produce] of the

* Third Report on Emigration from the United Kingdom. *p.* 321.

land, should be substituted for it," he makes the following comment.

'In one respect I perfectly agree with Dr. Doyle: I believe that the tithing system not only ought to be, but will be utterly and for ever abolished, and that not only in Ireland, but in England. It is true that tithes are not a burthen on the wages of the labourer or the profits of the farmer, but are a deduction, or rather an exception, from the landlord's rent; and that, except so far as inconvenience arises from the mode in which they are collected, or from their interference with the employment of capital (the latter of which inconveniences affects consumers in general, the citizen as well as the rustic), neither the labourer, the farmer, nor even the landlord, can justly complain of them: neither the labourer nor the farmer, because he does not really pay them, nor the landlord, because they are an interest in the soil which never was his—which he may wish for, as he may wish for his neighbour's field, but with no more right to appropriate.'—*Letter to Lord Howick. p.* 55.

The evil of tithes is of the same nature as the evil of a bone thrown between two dogs. It may be abstractedly said, that the bone is a good, if the dogs would only agree to take one the shank and the other the blade. But it is not in canine nature to do so without snarling, if not a fight. In the same manner it is not within the compass of cow-keeping humanity, to see the tenth bowl-full taken out of the milk-pail, and swallow down the sorrow by a reference to the abstruse truth, that each regretted bowl was or ought to have been truly and virtually present to the eyes of the tenant when he made his agreement with his landlord. It is too much to throw down the bone, and say it is not philosophy to quarrel. The friends of liberal principles are too strong to gain a point by fraud, or yield one through fear; but too little weight has been here given to the irritating circumstances connected with the levy of tithe.

'But though this is demonstrable, and demonstrable by a very simple reasoning process, it does not seem possible to make it plain to the uneducated classes: they cannot perceive that in their contests with the parson, they are fighting only the landlord's battle—that what is taken by the one is only so much withdrawn from the other—and that if they were to succeed in the contest, and add, as must be the ultimate result, tithe to rent, they would be only changing a landlord bound to residence and to the performance of specific duties, for a landlord often an absentee, and bound by law to the performance of no duties whatever, and must themselves bear the cost of those religious duties which an endowed church performs without any expense to individuals or to the state.'

'But this, as I said before, they cannot be made to understand. Ignorance and selfishness in this country, and in Ireland either those qualities, or, according to Dr. Doyle, "an innate love of justice, and "an indomitable hatred of oppression, like a gem upon the front of

the nation that no darkness can obscure" (121), have produced an abhorrence of tithes unassailable by argument or explanation, which has contributed as much as any other single cause to check Protestantism and civilization in Ireland, and in England is rapidly alienating the people from their natural instructors, the parochial clergy, and, by making a part of our institutions odious, has tended to destroy their confidence in all the others.'

'If we wish to preserve, not merely the usefulness, but even the existence of the Church of England as an establishment, this system must be abandoned during the interval in which commutation remains practicable.'

'The only question for a practical statesman is, for what provision ought tithes to be commuted?'

'It appears to me that there are only three provisions which could be substituted for tithes:'

'1. Payment by the state out of the public revenue.'

'2. A tax on rent.'

'3. Land.'

'The first may be summarily disposed of. It would be insecure, it would make the clergy unpopular, and it would increase the public burthens.'—*Id. p.* 58.

The concluding words leave out the fact, that the tithes would undoubtedly in some way or other be sold and placed in the opposite scale. But the great objection to this mode of provision plainly is, that while governments are such miserable machines as they have hitherto proved themselves, so feeble in the obtaining of any good to the community and so vigorous whenever its interests are to be counteracted,—any increase to the influence of governments is a crying evil which all men fit to walk abroad without the care of the Lord Chancellor are specially bound to resist.

'The second, a tax in money or corn on rent, would produce present relief. In time, however, the landlords would feel only the burthen, and would forget that the tithes had been surrendered to them as an equivalent. And, even if they continued to pay the tax, they would call out for corn-laws and restrictions as an indemnity. I believe the endowment of the Church of England to be among the most useful of our institutions; I believe that we are indebted to it, directly and indirectly, for benefits which long familiarity with them prevents our appreciating. But if my opinion were the reverse, if I sympathized with the clamour against the Church which has been raised—partly by ignorance, and partly, I fear, by evil intention—and wished her to perish, as an endowed church, in our own times, I should recommend tithes to be continued;—if I wished her to perish in our children's times, I should recommend them to be commuted for a tax on rent.'—*Id. p.* 58.

This is manifestly the language of a friend to the established, or as somebody has maliciously termed it, the *well-paid* church; and ought to have weight accordingly.

'The only permanent provision for which tithes can be commuted appears therefore to be land.'

'Objections have been raised to this mode of commutation, of which some appear to me to be absolutely unfounded, and the others to be capable of being altogether, or to a considerable extent, removed.' —*Id. p.* 58.

'It has been proposed to obviate these objections by a measure, a sketch of which I had the honour of communicating to your Lordship a few weeks ago.'

'You will probably recollect that the outline of that measure is,'—

'To form the different incumbents within a given district, say an archdeaconry, or probably some smaller district, into a corporation.'

'To vest in the corporation the revenues of all the different benefices, to be by them divided between the different incumbents in proportion to the value of the tithes of each respective benefice.'

'To appoint commissioners under whose superintendence the tithes belonging to each benefice should be exchanged with the owners of the soil for a portion of the lands out of which they issue, or sold to them for money, to be laid out in the purchase of lands. To enable the corporation to let such lands for not exceeding twenty-one years in possession, without taking any fine, to exchange them for other lands, or for money to be again laid out in the purchase of lands, and to give a similar power of leasing the tithes while uncommuted; and, lastly, to require each corporation to set apart every year a definite portion of its income, like the domus of a college, to be employed in permanent improvements.'

'The immediate effect of such a measure, even before much commutation had taken place, would be to allay much of the existing irritation. The clergyman of a parish would not be paid by his parishioners; they would transact business with the bursar or steward of the corporation. Compositions would be more permanent, and conducted according to more uniform and better-known rules. Where two or more of advowsons in the same district belong to one proprietor, the revenues of the benefices might be equalized. The tithes of ten or a dozen parishes would purchase a considerable estate, affording a regular income, and defraying the expenses of management and repairs; and it would not be necessary that the estate should be scattered through the parishes the tithes of which had been commuted; it would not be necessary, though certainly expedient, that it should be near any of them.'—*Id. p.* 64.

It will be time enough for fellows of colleges to stir, when Mr. Rothschild's purse is taken turn and turn about by the Saint-Simonians; and it does not appear to require supernatural genius in churchmen in general to discover, that there would be a gain in point of security against any irregular popular action, in putting themselves on a similar footing. The right of the community acting through the organ of its government, to apply any portion of what are called the revenues of the church to public purposes whenever those purposes are of more importance

than the services of the churchmen, will stand exactly where it was before; to wit, on the same ground as the right of reduction of a regiment. In both cases, the thing must be done with a decent attention to living interests; but the abstract right of the community to say that after a decent composition with living interests it will no longer make and pay above six bishops, is as clear as its right to say it will no longer have a colonel of the 135th Foot. Neither the bishop nor the colonel is to be turned into the streets; and the business-like way, if nothing particular hinders, is to pay the man till he dies. But no indefeisible bishopries; or else, by all that is fair play, indefeisible colonelcies! The colonels of regiments have a better title to demand the immutability of their offices than the churchmen. Their revenues were not taken by force from other people, that held them by the gift of testators who would have considered themselves as condemned to the lowest place of torment if they had voluntarily left a chance of their coming to the present possessors. A sacerdotal newspaper has said, the testators meant to give them to *the True Church*. The Muggletonians shall hold them by the same rule, when they can get them.

Two important points are to be settled with the Church, in any commutation whatsoever. And those are,—First, that she has no right to claim anything for the advantage that may arise to the public out of the commutation, and will never arise without. This would be allowing the establishment to make a market of her own mischief, in a way which it may be hoped she will be much too wise to think of bringing forward. Secondly, that what she can fairly charge for, is what she actually can get; with an exception in favour of such portions of revenue as she may be deprived of by physical resistance, deduction however made of what would be the probable expenses of recovery. A church that came into possession of a hated, resisted claim, has not a right to charge for it, except in some of the extremest cases, as if it was an amiable and uncontested one.

In conclusion, opportunity is taken to reject and disavow the principle, which would continue the existence of a portion of removeable evil, on the pretence of at some future period effecting the destruction of a greater. This may suit the policy of feebleness; but the Radicals have a clear view of the series of initial depression, medial struggle, and final victory with the whole field to themselves, which the dilatory tactics of the leaders with whom they are for the present connected, appear to promise them.

The Preface to the Third Edition of the work of the Oxford Professor, is remarkable for the almost literal corroboration given in its two concluding paragraphs, to the assertion that

the effect of tithes is to make "Britain be a less Britain," and to the similar assertion on the effect of absenteeism, contained in the Article of this Review already cited in a Note*.

WESTMINSTER REVIEW, 1 April, 1832.

ART. X.—1. *Report of a Speech of the Right Honourable C. Poulett Thomson on the Silk Trade.* Morning Chronicle, March 2, 1832.

2. Id. *on Finance.* Morning Chronicle, Feb. 7, 1832.

IT was observed with surprise, in a conversation with some individuals of eminence as political economists and general reasoners, that they did not appear convinced of what may be denominated the *double incidence* of the extra price got up by means of duties and prohibitions. There may have been misapprehension on some side; for the *fugacia verba* are vastly inferior instruments to the *litera scripta*, for carrying on an examination where everything depends on precision of statement and accuracy of mutual understanding. There may easily have been some mistake; but what is meant by the *double incidence* is this,—that what is given to one man in the shape of artificial extra price, is taken twice over from somebody else. Now either this is true or it is not. If it is not, the Westminster Review, which prides itself above all things in not belonging to the school of political economy which makes a point of never avowing an amendment or an error, will declare itself to have been wrong the moment it shall be proved upon it. If it is true, it is a matter of great importance both at the present moment and at all future moments; and as all questions are determinable with pains, it is great pity that anybody should be left in doubt. This is not written in bravado; but with a full and experimental consciousness of the deceitfulness of preconceived opinion, and the great advantage of a fresh eye in detecting fallacy. Only, as before, let the seat of the fallacy be shown.

What has been maintained † and is still maintained, is, that when a glove-maker, or a silk-weaver, obliges the consumer to give three shillings for the article which could be procured elsewhere for two, there is not a simple, or a single, loss of the shilling which he gains; but that it is lost twice over. *Not that it is lost twice over upon the total average,* for that would

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* To the authorities quoted in aid, may be added that of Dr. Chalmers; whose book "On Political Economy, in Connexion with the Moral State and Moral Prospects of Society," obtained since this Article was begun, is of too much importance to be passed over with an accidental notice.—See "Chap. X. On Tithes."

† Article on 'Free Trade' (in the Westminster Review for January 1830. Art. 7.). Republished as a pamphlet.

be overlooking that the gainer gains it once;—but that the gain of the glove or silk trade from the shilling falls in the shape of equal loss on some other trades, which makes *incidence No. One* and creates a balance, and that the loss falls over again on the consumer besides, which makes *incidence No. Two.*

Recurring to the case set out with, there seems no dispute that with respect to the *two* shillings, the gain of the forcible glove-seller is balanced by the loss of the Birmingham trader (for example) who would have procured gloves from France by the exchange of his wares. This part therefore may be dismissed, and the question confined to the *one.* And here again there seems to be no dispute, that if the wearer is made to expend a shilling more on gloves, he must expend a shilling less on something else. That the man must economize in something, will be manifest to everybody; for he cannot both spend his third shilling on gloves and on something else; and he *will* spend it on something else if he is not forced to spend it on the gloves, unless it can be proved that he will lock it up for ever, or throw it into the river.

If an Act of Parliament were to direct that all men should wear linen coats instead of woollen, the woollen-drapers would present themselves in crowds to parliament to state, that it was quite impossible any national gain should arise from this;—that though it was clearly a good thing for the trade in linens, it was equally a bad one for the trade in woollens;—that though the consumer might not complain, inasmuch as he got linen coats for his money instead of woollen ones, yet they the woollen-drapers had a right to complain, to the fullest extent that men can do, who see their property and profits taken from them to be given to another without any plea of public advantage or necessity. They would say, that though there might be no loss to the public in the aggregate, the gains of the linen-drapers were balanced by an incidence on *them,* and this incidence they maintained to be an intolerable evil and injustice.

Now in all this, as already intimated, there would be no actual loss to the consumer, except in the matter of fancy; for he gets linen coats for his money instead of woollen ones. But put the case that the trade of woollen-drapers is diminished, by a shilling or by a million shillings, not for the purpose of buying linen from a trader in linens, but for the purpose of being forcibly applied to the use of the trader who sells dear gloves or silks by Act of Parliament. The woollen-draper is in no wise comforted by the change; on *him* there is the single incidence as before. But there is a new feature in the case,—which is, that the payer of the money gets no linen coats. He simply pays three shillings instead of two, and gets nothing for

the difference. On him, therefore, the world witnesses a second incidence, which makes the *double*; the whole being resolvable into the fact, that in this case there is a voluntary destruction or throwing away of money and labour by Act of Parliament, and in the other there is not. And the results will be of precisely the same nature, if, instead of the woollen-draper, the losing trader should be the pastry-cook or the tobacconist.

If a highwayman takes a shilling from a true man on the road, the gain of the highwayman is balanced by a *single incidence* upon the true man; and in the ulterior consequences, there is either no difference, or a mere transfer of place which makes no difference in the aggregate. If the two individuals would spend the shilling at the same shop, then there is no difference in the ulterior consequences. If one spends it in brandy-and-water and the other would have bought religious tracts, then the increase of custom to one of these trades is balanced by the loss of custom to the other. And as the enjoyment to the robber balances the privation of the sufferer, there is a final balance on the whole, as in the case of the woollen-drapers.

And here then appears to come the strength of the adversary's case;—involving the oversight which is very likely to have been at the bottom of the dispute. Suppose the dealer in gloves, instead of taking a shilling by Act of Parliament, had taken it on the highway. Could there have been a *single* incidence in this last case, and a *double* one in the other? Or could it have made any difference in the aggregate of consequences, whether the shilling was stolen by the glove-merchant to be applied to the benefit of his trade, or by him or somebody else to be expended in brandy-and-water? This looks like a *poser*; but is not. The answer is, Yes. The fallacy is a very subtile one; but there is a fallacy. And it consists in confounding the cases where the glove-merchant should rob to expend on brandy-and-water, and to apply to the benefit of his trade. He may do which he pleases; but he cannot do both. If he does the first, he stands simply in the shoes of the highwayman; and his being a glove-merchant on other days, is an inoperative accident. If he does the second, the benefit to his trade balances the loss of the brandy-and-water to himself; but there is a new incidence in the shape of loss of trade to the tavern-keeper, which makes *incidence No. Two.*

Theft, then, is an evil of *single* incidence; money taken on pretence of protection to trade, is of *double.* If every individual in the community were to practise simple theft in turn, it might be so arranged that not only in the aggregate but in the case of each individual there should be a balance. If every individual could have a trade with a protection to it, it might be so ar-

ranged that his apparent gains from his extra price should be balanced by what he paid in extra prices to other people; but the sum total of the apparent gains from protection, would be lost among the public besides, through the insanity of everybody chusing to have the dearer article,—and might by possibility be so divided as to fall on every man to an amount equal to his apparent gains. Where is the error in this? Let it be a contest *à l'amiable* to demonstrate its locality. But if it is not demonstrated, then let there be an acknowledgment of the double incidence.

Now then, to the moral. If the glove-makers and silk-weavers come before parliament *in formâ pauperum*, and prove to the satisfaction of the guardians of the public purse that it is necessary the community should disburse thirty thousand pounds on them in the way of charity, let thirty thousand pounds be given them at once out of the community's pockets, and let there be an end. But do not have the perverse ingenuity, to put the thirty thousand pounds into their pockets by a process, which shall first take it out of the pockets of some other traders of their countrymen, *and then make the loss forty thousand*, by adding the gratuitous loss of ten thousand to the consumers besides. Let us be charitable, let us be profuse, let us allow anybody to take our money that will; but let us endeavour to insist upon it, that they shall give away our money *simpliciter* and not throw away a quarter by the way, and that when they see fit to make a present of thirty thousand pounds, they shall not make our loss forty, by the awkwardness of their process. Or if we cannot hinder it, let us at all events give it to be understood, we *know* that they are taking forty thousand pounds, and that it is their pleasure to waste ten thousand by the way, for the sake of the mystification that may be thrown about the other thirty by the contrivance.

It is very true that it is difficult to collect and embody the tradesmen from whom all the extra shillings paid by law for the gloves must necessarily be taken; and this is the strong hold in which the common enemy puts his trust. But the system of everybody raising money upon everybody, is not the less absurd because the everybody happens to be considerably dispersed. The tradesmen who are to take, are all ready to bawl upon a signal; and the tradesmen who are to lose, are divided over unknown spaces, and there is no getting any two of them to whisper in concert. But it does not the less follow that the plan is one of perfect idiocy, except so far as it is wise on the part of those who think they can plunder by means of it, and could not plunder without. At what æra, in what portion of the period intervening between the present and the arrival of the

final comet, will this verity have made its appearance in the House of Commons?

An immense joke was raised there lately against the Right Hon. gentleman the Reports of whose Speeches are cited, which displays with great *naïveté* the nature of the first principles of Toryism. On occasion of the produce of a tax falling short, it occurred to the Right Hon. gentleman to observe, that at all events the difference was *fructifying* in the pockets of the people. And upon this the Tories hustled him. With all deference, their mistake was simply in the assumption, that the relation between a government and people, is that of plunderer and victim. If a pickpocket should be heard saying, "I missed that guinea, but at all events it is fructifying in the gentleman's pocket;"—the Tory joke would hold good against him. If a creditable man was heard to say, "I meant to have spent my children's guinea in taking them to the opera; but at all events they have it for another time;"—the world would estimate the constitutional obliquity and unconscious ignorance of equitable distinctions, which could lead any person to confound this case with the other. Why will the Right Hon. gentleman never answer his financial enemies with the *double incidence?*

(Four Supplements to this Article in following numbers.)

WESTMINSTER REVIEW, 1 April, 1832.

ART. XI.—*Instructions to my Daughter, for playing on the Enharmonic Guitar. Being an attempt to effect the execution of correct harmony, on principles analogous to those of the ancient Enharmonic.* By a Member of the University of Cambridge*.—London. Goulding and D'Almaine, 20 Soho Square. 1829. 4to. pp. 30. With Plates.

THIS is a piece of musical radicalism; and like other pieces of radicalism, it will succeed in the end if it is right;—the principle of radicalism everywhere, being that reason has been given for man's use, and it is reasonable he should use it. The object in the present instance is to prove, that in the same manner as science can determine the form of a lens that is most effective in aiding the eye, and can do this with vastly more precision, certainty, and completeness, than could be arrived at by any number of experimental rubbings and exploratory grindings, and referring the results to the judgment of

* The name of the author of the present Volumes, was affixed to the Preface. Under these circumstances no scruple has been felt in making the same alterations both in the text and in the commentary, that would have been made in a new edition of either.

the eye,—so it can determine the sounds which make the basis of the effect upon the ear called music, with vastly more precision and facility, than can be attained by any possible number of vague experiments, and referring the results to the judgment of the ear. And in connexion with this it is attempted to be established, that the Enharmonic of the ancients, from the accounts of it that remain, was an effort—though, from an error in the early stages, an eminently unsuccessful one—to apply the scale of perfect sounds which should be thus determined, to any sound on which it should be desired to begin anew, or in other words to changes of key; and finally, that what the ancients failed in, the moderns ought to accomplish.

The fallacy by which the musical Tories in all ages,—the enemies of "theory," which means reasoning, and the admirers of "practical" conclusions, which mean blundering on by the rule of thumb,—have resisted the introduction of science into this department of the arts, is a statement like the following. "If science asserts anything to be harmonious which the ear disapproves, then science is wrong. If it asserts nothing but what can also be discovered by the ear, where is the use of science?" The weakness of this, consists in keeping back all that science may add of precision and facility; and is best exposed by a reference to the sister case of Optics. "If Mr. Dollond's application of the theory of spherical or parabolic surfaces produces a bad pair of spectacles, Mr. Dollond is in the wrong. If it produces nothing but what might have been arrived at by grinding a piece of glass into forms a little more convex or concave and noting the effect of the alterations on the eye, where is the good of Mr. Dollond?" Everybody perceives that the fallacy in this, is in keeping back the simplicity, the accuracy, and the ultimate applicability to practical use, of the theory employed by Mr. Dollond; and in endeavouring to substitute for it a tentative process, which even if it be allowed that in some individual cases the results should be of equal perfectness and value, is vastly inferior to the other in the aggregate of consequences. It may be conceded, in both cases, that if science determines anything which the sense disapproves, science is in the wrong; but what it is intended to maintain and defend is, that in both cases, science not only does nothing of this kind, but that it is capable of going down at once upon the truth, with a directness and effect which tentative processes without the aid of first principles will vainly hobble after in pursuit.

The dispute upon this point as relates to music, is at least at old as the contest between Aristoxenus and the Pythagoreans, which dates as early as 300 years before the Christian æra. But

27638

it would be unfair to rank Aristoxenus among the irrational opponents of scientific inquiry; for there existed in his case the striking and not very frequent fact, that the scientific men were wrong. The opposition of Aristoxenus was therefore in reality nothing but a good ear declaring itself against a *faulty* theoretical division. The musical mathematicians of antiquity took as many as three consecutive steps into the truth; but their next was a marvellous blunder,—a pitiable missing of the right though it lay before them, and plunging into the wrong,—which marred the whole of their results, and caused all ancient music to flounder in a mass of unharmony. If mathematicians would lead the world, the first essential is that they should be right. If they are not, they must not be surprised if the supporters of the rule of thumb take the opportunity to get before them.

The question on which the whole issue may be said to rest, is whether any reason can be assigned, why one set of sounds make music by their composition or succession and another set do not,—or whether this is a mystery to be found only in fiddlers' ears, and of which no ulterior explanation can be given. To which, if it be conceded that any reason can be given at all, may be added the further question, whether the principles that explain the phænomena to any extent or in any degree, are not capable of being extended so as to afford a plenary elucidation of the whole.

The histories of all nations refer to very early periods the discovery, that certain successions or combinations of sounds have the effect upon the ear which is implied by *music;* and it may be assumed that in all countries a considerable degree of practical acquaintance has been acquired with the sounds, before any person has thought of investigating the cause. The story of Pythagoras's listening to blacksmiths' hammers, and discovering that the different sounds had some relation to the weights, has been sufficient to secure to that philosopher the renown of being the first who sought for the explanation of musical relations in the properties of matter. The account given by Nicomachus is, that Pythagoras "heard some iron hammers striking on an anvil, and giving out sounds that made most harmonious combinations with one another, all except one pair*;" which led him to inquire what were the peculiarities of the hammers which produced these different effects. Whether

* ἐπήκουσε ῥαιστήρων σιδηρῶν ἐπ' ἄκμονι ῥαιόντων, καὶ τοὺς ἤχους παραμιξ πρὸς ἀλλήλους συμφωνοτάτους ἀποδιδόντων, πλὴν μιᾶς συζυγίας.—Nicomachi Harmonices Manualis, p. 10. In the *Antiquae Musicae auctores septem* of Marcus Meibomius. Amstelod. 1652. Mus. Brit.

this is an exact account or not, some observation of this kind appears to have speedily led to the discovery, that of strings of the same thickness and composition, and stretched by the same weight, those gave the same musical sound (or were what is called in unison) which were of equal lengths;—that if of two strings in unison as above, one was shortened by a half, it produced a sound which, though very far from being in unison with the sound of the other, might be heard contemporaneously with it with a strong sensation of satisfaction and consciousness of agreement, and that the two sounds in fact bore that particular relation to each other, by which two voices of very different kinds, as for instance those of a man and a child, can sing the same tune or air as really as if they sang in unison, being what musicians have since distinguished by the title of *Octaves*;—that if instead of a half the string was shortened by a third part, there was produced a note which, heard either in combination with or succession to the first, created one of those marked effects which all who had attained to any degree of musical execution by the guidance of the ear, had treasured up as one of the most efficient weapons in the armoury of sweet sounds, being what modern musicians name the *Fifth*;—and that if instead of a third part it was shortened by a fourth, there was produced another note, very distinct from the last, but which, like it, was immediately recognizable as one of the relations which experimental musicians had agreed in placing among their sources of delight, being the same which in modern times is called the *Fourth*.

So far Pythagoras and his followers appear to have run well; but afterwards Typhon hindered. Instead of pursuing the clue of which they already had hold, and examining the effects of shortening the original string by a fifth part and by a sixth, they strayed into shortening the results of previous experiments by a third, and lengthening them by an eighth, being manifestly induced by the prospect of obtaining intervals like that which they had found existing between the *Fifth* and *Fourth*, being the same to which modern nomenclature, in reference to other intervals not yet mentioned, has given the title of the *Great* or *Greater Tone*. And here was the beginning of sorrows. Had Apollo and the Muses Nine but led them to try the effects of shortening the original string by the fifth part and by the sixth, they would have discovered the pleasing relations of sound which modern musicians have denominated the Major and the Minor *Third*, and their way would have been open to "demonstrate" (to borrow an expression from the anatomists,) 1st, the existence of what has been since called the *Small* or *Smaller* Tone, as being less than the other before

mentioned by the difference named a Comma, and which they would have found existing between the Minor Third and the Fourth; 2ndly, the true measure of the interval between the Major and the Minor Third, which is in fact the interval between a note and its Sharp or Flat in the same key; 3dly, the ease with which the interval between the *Fifth* and the *Octave* is divisible into intervals equal to the others and lying in the same order from the great central interval outwards, by shortening the string by the comparatively simple fractions of three-eighths and two-fifths, thus arriving at the discovery of those other pleasing relations which the moderns have named the Minor and the Major *Sixth;* 4thly, the wonderful congruity, dependent on the properties of numbers, by which each of the sounds thus determined as making harmonious intervals with the Key-note or sound of the original string, makes harmonious intervals of some of the same kinds, with all the others, with the exception only of the cases where the interval is smaller than any of those which have been distinguished as harmonious; and 5thly, they would have been in a condition to investigate the means of dividing the vacant spaces at the two ends of the octave*, in such manner as should continue to form harmonious intervals with the sounds already established as making harmonious intervals with the Key-note, thus leading to the determination of a Minor and a Major *Seventh*, and by analogy a Major and a Minor *Second*. But Apollo and the Muses left them to themselves; and the consequence was, they stumbled and they fell. The "Canon" of Euclid—the Euclid of geometry†, unless a portion of uncertainty which attaches to the authorship permit him to escape—is evidence of the feebleness of man when he is predestined to do wrong. The attempt at the division of the

* When the word octave is begun with a small instead of a capital letter, it implies the space intercepted between the lengths of string that give the Key-note and the sound called the Octave. The space intercepted between the lengths that make the Octave and the Double Octave, the Double Octave and the Treble, &c. is called the *second*, *third* octave, &c. And any intermediate lengths, or the sounds produced by them, are said to lie in the first, second, third octave, &c. as the case may be.

† A description of the "Section of the Canon" attributed to Euclid, will be interesting for the sake of comparison.

The whole or original string on which the experiment of division is to be made, the ancients called προσλαμβανόμενος, *proslambanomenos;* which may be translated, the string "taken to begin with." And they always suppose the *head* of the string, or the end at which portions are to be cut off or added by stopping the string in different places, to be uppermost, as in an instrument held in the manner of the guitar. The consequence of which is, that a deep note, as being stopped higher up, they call an *upper* note; and a shrill one, as being stopped lower down, they call a *lower;* being directly the contrary of the modern nomenclature.

The author of the "Section of the Canon" begins by dividing his original string into four equal parts.

He takes *three* of these (counting from the bridge towards the head), and

Canon,—in other words, at the division of a string into the lengths which produce the sounds that make music in a single key,—was

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produces the *ὑπάτων διάτονος, hypatôn diatonos;* being what the moderns call the Fourth.

He takes *two*, and produces the *μέση, mésé*, or Octave.

He takes *one*, and produces the *νήτη ὑπερβολαίων, nêtê hyperbolæôn*, being the Double Octave.

He then divides the string that produces the Fourth in half, and gets the *νήτη συνημμένων, nêtê synemmenôn*, being the Fourth in the second octave.

He divides the half of the original string into three equal parts, and cuts off one; thereby producing the *νήτη διεζευγμένων, nêtê diezeugmenôn*, or what the moderns would call the Fifth in the second octave.

He doubles the *nêtê diezeugmenôn*, and produces the *ὑπάτη μέσων, hypatê mesôn;* being what the moderns call the Fifth.

He cuts off a third part from the *hypatê mesôn*, and produces what he calls the *παραμέση, paramésê;* being in modern language a Great Tone above the Octave.

He doubles the *paramésê*, and produces what he calls the *ὑπάτη ὑπάτων, hypatê hypatôn*, being in modern language a Great Tone above the Key-note. Called elsewhere *ὑπάτη βαρεῖα, hypatê bareia.*

These sounds he calls *ἑστῶτες*, "standing," and *φθόγγοι τοῦ ἀμεταβόλου συστήματος*, "sounds of the system that never changes."

He next divides the string that makes the Double Octave into eight equal parts, and adds one; making thereby what he calls the *παρανήτη ὑπερβολαίων διάτονος, paranêtê hyperbolæôn diatonos*, being in modern language a Great Tone below the Double Octave, or the sound which is a comma flatter than what is ordinarily taken for the Minor Seventh, in the second octave.

He then divides the *paranêtê hyperbolæôn diatonos* also into eight equal parts, and adds one; making thereby what he calls the *τρίτη ὑπερβολαίων, tritê hyperbolæôn*, being in modern language a Great Tone lower than the last, or a Minor Sixth too flat by a comma, in the second octave.

He next divides the *tritê hyperbolæôn* into three equal parts, and adds one; making thereby what he calls the *τρίτη διεζευγμένων, tritê diezeugmenôn*, being in modern language a Minor Third too flat by a comma, in the second octave.

He next divides the *tritê diezeugmenôn* into two equal parts, and adds one; making thereby what he calls the *παρυπάτη μέσων, parhypatê mesôn*, being in modern language a Minor Sixth too flat by a comma, and in fact an Octave below the *tritê hyperbolæôn.*

He next adds to the string that makes the *parhypatê mesôn*, a length equal to the difference between it and the string that makes the *tritê diezeugmenôn;* obtaining thereby what he calls the *παρυπάτη ὑπάτων, parhypatê hypatôn*, being in modern language a Minor Third too flat by a comma, and in fact an Octave below the *tritê diezeugmenôn.*

Lastly, he takes three-fourths of the string that makes the *hypatôn diatonos* or Fourth; obtaining thereby what he calls the *μέσων διάτονος, mesôn diatonos*, being in modern language a Great Tone below the Octave, or a comma flatter than what is ordinarily taken for the Minor Seventh, and in fact an Octave below the *paranêtê hyperbolæôn diatonos.* And the six last-mentioned sounds he calls *φερόμενοι*, "shifting," and *κινούμενοι*, "moveable." The meaning of these terms, and of the opposite ones, being stated to be, that the sounds called "standing" or "unchanging" are found without alteration in the different *genera*, (an assumption, by the way, which is not borne out by the scales presented by Ptolemy), while the sounds which occupy the places of those named "moveable," are not always in the proportions here given, but are found to be different in the different *genera.*—*See Euclid's "Section of the Canon," p. 37.* Meibomius.

In the plate attached in the edition of Meibomius there is represented another

a failure; and, by necessity, everything of a more complex nature which was built upon it was a failure also. The ancients

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note between the Octave and the *paramésé*, under the title of τρίτη συνημμένων, *tritè synemmenôn*. But it is not mentioned in the "Section of the Canon;" though its name, along with many others in similar circumstances, appears in the lists contained in the "Introduction to Harmony" prefixed. In a table of ratios added by Meibomius the editor, its length is given as being to that which makes the Octave, as 4374 to 4608; and from the name in the plate being in a different type and preceded by an asterisk, there appears to be an intended reference to something which has not been discovered. If the ratio is to be considered as of good authority, the sound is that which would be obtained by dividing the string that makes the *tritè hyperbolæôn* into two equal parts, and adding one. Such a sound would in modern language be a Minor Second too flat by a comma, in the second octave. The principal use of observing this sound, is that it offers assistance in settling the meaning of the term *synemmenôn*, as will be hereafter seen.

If the different lengths of string assigned as above are stopped in succession as might be done on a guitar, beginning with the longest and omitting the *proslambanomenos* or open string, they will stand as follows.

Hypatè hypatôn, the "uppermost of the uppermost set." Called elsewhere *Hypatè barcia*, literally the "deep uppermost."
Parhypatè hypatôn, the "deepest-but-one of the uppermost set."
Hypatôn diatonos, the "*diatonic* of the uppermost set." Called the *diatonic*, (as may be collected from comparison of all the instances where the term appears), from the circumstance of its being distant by a Great Tone from the sound next to it on each side.
Hypatè mesôn, the "uppermost of the middle set."
Parhypatè mesôn, the "uppermost-but-one of the middle set."
Mesôn diatonos, the "*diatonic* of the middle set."
Mésé, the "middle" of the string; i. e. the Octave.

On the other side of the Octave, are

Paramésé, the "next to the Octave."
Tritè diezeugmenôn, the "third of the set that is made by adding a third part." As will be treated of hereafter.
Nètè synemmenôn, the "lowest of the set that is made by adding half." As will be treated of hereafter.
Nètè diezeugmenôn, the "lowest of the set that is made by adding a third part."
Tritè hyperbolæôn, the "third of the *ultra* or extreme set."
Paranètè hyperbolæôn diatonos, the "*diatonic* that is lowest-but-one of the extreme set."
Nètè hyperbolæôn, the "lowest of the extreme set;" being the Double Octave.

The seven last sounds are respectively the Octaves to the seven that preceded; and it may be matter of surprise that the Greek author did not take advantage of this to simplify both the nomenclature of his sounds and his process of arriving at them. The use of the term διὰ πάσων, *dia pasôn*, "through all," to signify the sound which makes an Octave with any other sound, is proof that the Greeks were aware that all the musical relations were presented in the interval which makes an octave, and that any other sounds were only Octaves to some that had gone before.

On examining the names it is plain that the three notes between the Key-note and the Fourth inclusive, are called the "uppermost set," and the three between the Fifth inclusive and the Octave are called the "middle set;" while in each of these sets the notes are distinguished into an "uppermost," an "uppermost-but-one," and a "*diatonic*," the origin of which last term has been intimated.

In the second octave the three shrillest sounds are called the "*ultra* or extreme set," and are distinguished into a "lowest," a "lowest-but-one," and a "third;" the "lowest" or shrillest of all, being the Double Octave. The only difficulty therefore is in the meaning of the terms *diezeugmenôn* and *synemmenôn*,

had the luck, by the mere fact of their being the ancients, to have the first chance at trying their hands on all imaginable subjects; and great has been the outcry of their "wisdom," raised upon this simple ground. The ill success of their attempts in music, is proof that they had no patent from the gods but their priority of birth.

As intimated already, the failure of the ancients is traceable to the fact, that after having discovered that dividing a string in the proportions of 1 to 2, 2 to 3, and 3 to 4, gave sounds

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which appear in the three next. And on this may be observed, that the sounds in the class of *diezeugmenôn* are formed or formable from the corresponding sounds in the class of *hyperbolæôn* (that is, the *nêtê* from the *nêtê*, and the *tritê* from the *tritê*), by augmenting the string of the latter by a third of itself. And the sound called *nêtê synemmenôn* is or may be formed from the *nêtê hyperbolæôn* by augmenting the string of the last, not by a third of itself, but by a half; and the *tritê synemmenôn* (if its construction as quoted may be depended on) is formed by the same process from the *tritê hyperbolæôn*. The suspicion therefore may be, that *synemmenôn* (from σὺν and ἅπτω) meant what a sailor would call "fished" or "spliced," augmented by the application of a portion of like matter, viz. to the extent of the simplest fraction or one half; and that *diezeugmenôn* (from διὰ and ζεύγος) meant "made up into yokes or pairs," or completed to an even number, as three oxen would be by the addition of a fourth. If this should really be the meaning, the translators have bandied the terms about under the titles of "conjunct" and "disjunct," with very little chance of being the wiser for it. And as the Greek writer in two cases out of three arrives at the sounds by a process different from that in which the names may be held to have originated, it may be inferred that they were named by somebody before him, and that he took the names without caring whether he arrived at the sounds by the same process as the inventor, or only by one equivalent in the result.

The reason why no sounds appear under the names of *paranêtê synemmenôn* and *paranêtê diezeugmenôn*, is because these sounds are identical with the *tritê diezeugmenôn* and *nêtê synemmenôn*; as will be found on trial. And the reason of the last two names being preferred to the others, was probably that they were shortest; though it involved the solecism of sounds being called "third" of a set, without any appearing under the title of "second." It may be gathered from the note of Meibomius in p. 54, that in some copies the other names actually appear; *mirâ confusione, et lectione insulsâ*, he says, though the fact is valuable as pointing to the two ways of arriving at the same sound, and explaining the origin of the nomenclature.

Nicomachûs expressly remarks the identity between the *paranêtê diezeugmenôn* and *nêtê synemmenôn*; and indirectly between the *paranêtê synemmenôn* and *tritê diezeugmenôn*, for he states that one is at the distance of a tone and a half-tone from the Octave, and the other of a half-tone and a tone (See Nicomachus, p. 22, 23, Edit. Meibom.). He also describes the *tritê synemmenôn* as being at the distance of a half-tone from the Octave; which by comparison with what he calls a half-tone in other places, makes the sound assigned by Meibomius in the table attached to the "Section of the Canon."

It is plain from an expression at the commencement of the "Section of the Canon," that its author knew that the difference in the pitch of sounds was caused by the difference of velocity in the vibrations. As an example of the time that may intervene between the starting of an idea and its developement, the first who demonstrated the laws of the vibrations with any exactness, is stated to have been Dr. Taylor, an English mathematician, in 1715. See *Encyclopédie*, Art. CORDE SONORE.

On the whole, the Euclidian scale turns out to be the notes of the Minor series, shockingly out of tune, and without the Major Seventh which the moderns introduce in ascending. It consequently is *not* the scale of the old Scotch music and the Chinese, represented by playing on only the black keys of the pianoforte; which consists of the notes of the Major series, wanting the Fourth and Seventh.

which the ear recognized as productive of musical effect, they did not go on to try the result of dividing it in the next simpler proportions of 4 to 5 and 5 to 6, and continuing the search on the other side of the Fifth, by trying such simple proportions as would produce sounds in that direction. And this leads to the general questions, *why* the simplicity of proportion in the divisions should be connected with musical effect, and *what is the nature and degree of the evidence* that this is really the case. It will be assumed, in this stage, that the reader is acquainted with the discovery of the moderns, that the number of vibrations made in a given time by different portions of a uniform string stretched with a constant weight, is in the inverse ratio of the lengths.

'Since the combinations of sounds described under the title of Harmonious, agree in producing a pleasing effect upon the ear, it is reasonable to conclude that the cause of this common effect is to be looked for in something that is common to all the combinations.'

'Now the striking circumstance common to them all, is that the proportions between the number of vibrations made by the two strings respectively in a given time, *are the simplest that numbers will admit of*; or in other words, are expressed by the briefest and least complicated numbers that it is possible to bring together. In the case of unison for instance, the proportion is that of equality, or as 1 to 1; which is the simplest that can be devised. In the Octave, it is as 1 to 2; which is the next simplest. In the Fifth, as 2 to 3; which is the next. In the Fourth, as 3 to 4. And so on.'

'It is reasonable therefore, and according to the allowed rules of natural philosophy, to conclude, that this common property is in some way or other the cause of the common effect. Why or in what manner the effect is produced, it may not be practicable fully to explain; any more than it is practicable fully to explain, why vision takes place when an image is formed on the *retina* or membrane of the eye. But whether it can be fully explained or not, there is nothing to destroy the evidence, that the fact observed is in some way the cause.'—*p.* 2.

The attempts to proceed further with the pursuit of the cause, will be noticed all together in another place.

'If then it is asked, how it is proved that the lengths determined by the proportions stated, are what produce the veritable Harmonious combinations whose names are attached,—and how it is known that a little more or a little less might not be as good or better, when perhaps the difference altogether is less than can well be appreciated by the ear,—the answer is, that the coincidence of *all* the agreeable effects with the simple proportions, is evidence that the simplicity of the proportions is the cause of the effect, and consequently these proportions are what produce the agreeable effect, and any others are not. To object, that for all we can tell, some others may be as good or better,—is like objecting that for all we can tell, there may be a figure that shall look rounder than the circle that is made with a pair of

compasses. The way to make a figure appear round to the eye, is to give it the mathematical property on which the sensation of roundness is known to depend. And the way to make a combination of sounds agreeable to the ear, is to give it the mathematical property with which the agreeableness of combinations in general is known to be connected."—*p.* 3.

'If nature had presented us with only *one* harmonious combination, there would have been a doubt about the dependence of the effect on the cause assigned. But it is because she has presented us with a multitude, all agreeing in the same circumstance of simplicity of proportion,—that the dependence is definitively proved.'—*Id.*

The Pythagoreans did not advance this proof, for the best of all reasons, which is, that they do not appear to have ever discovered the general dependence of the harmonious combinations on the simple proportions at all. They began in the way to discover it; and then diverged. Among the multifarious scales presented by Ptolemy * as the produce of their industry in dividing the Canon in every way except the right,—

'instances may be found in separate places, of a correct Minor Third, Minor Sixth, and Major Sixth; but none, so far as has been observed, of a Major Third. The insulated occurrence of these instances, proves that they make no part of a general system of dependence on the simple ratios.'—*Note in* p. 28.

If the harmonious combinations are classed according to the simplicity† of the proportions concerned in making them,—which, without debating the reason here, coincides with the judgment of the ear as to the degrees in which they respectively possess the quality from which the name "harmonious" is derived,—they will stand as follows.

	Proportion of the number of vibrations made by the two strings respectively in the same time.
Unison	1 : 1
Octave	1 : 2
Fifth	2 : 3
Fourth	3 : 4
Major Sixth	3 : 5
Major Third	4 : 5
Minor Third	5 : 6
Minor Sixth	5 : 8

* Ptolemæi (Claudii) Harmonicorum Libri Tres. J. Wallis edidit. *Oxon.* 1682. Mus. Brit.

† The general rule for deciding which of two proportions is the simplest, would appear to be, that (both being first reduced to their lowest terms, and to the same octave,) that proportion is the simplest in which the product of the two terms is least. If the sounds are not in the same octave, they must be reduced to it by doubling the first or smallest term of each ratio, as many times as can be done without making it equal to or greater than the other term.

These eight harmonious combinations of sounds are called *Concords;* and the sounds which make Concords with the Key-note, are called *Consonances.* In which it is useful to be precise in distinguishing, that a *Concord* is the harmonious combination made by any two sounds that are capable of doing it; and a *Consonance* is a single sound, that makes a Concord of some kind with the Key-note*.

'The two numbers that express the proportion between the lengths or portions of the same string which produce any particular interval of sound, are called the *ratio* of such interval. Thus 3 : 4 is the ratio of the Fourth; and 3 : 5 of the Major Sixth. And since the ratio expresses the proportion of the length of the shorter string to that of the longer, it follows that by inverting the ratio—or taking it with the other number foremost—there will be expressed the proportion between the number of their vibrations in a given time.'

'If the smallest of the numbers which compose the ratio is divided by the greatest, the fraction which is the result is called the *measure;* as, for example, the measure of the Fourth is ¾, or in decimals ·75, and that of the Major Sixth is ⅗ or ·6. And the proportion of the *measure* to unity or 1, presents the *ratio* again.'

'Hence if it is desired to define any particular interval, as for instance a Major Sixth,—it is only necessary to say that its ratio is 3 : 5, or that its measure is ⅗ or ·6.'

'If the measures of the different Consonances from the Key-note to the Octave inclusive, are marked off in succession on the same string, as for instance on one of the strings of the Guitar,—measuring from the end next the bridge, and considering the entire string (which is to sound the Key-note) as unity or 1,—they determine the points at which the string must be stopped, in order to produce the several Consonances respectively. A string thus divided—(with the addition of other divisions to be hereafter described)—is called the *Harmonical Canon;* or is said to be divided in the *canonical proportions.* It is best to consider the division as restricted to the space between the head of the string and the place of the Octave, or in other words to the upper half of the string. For any divisions belonging to a second or third octave, are only repetitions of the proportions in the first.'

'By finding the *sum* of two intervals, is meant ascertaining the in-

* It would be an immense advantage in point of clearness, if a similar distinction could be carried through the various meanings now huddled together under the terms of Second, Third, Fourth, &c.; which besides being applied both to the sound and to the combination, are moreover confusible with fractional divisions. The Greeks had made some progress in such a nomenclature. Thus the Fourth the sound in the Canon, is *hypatôn diatonos;* the Fourth the combination or interval, is διὰ τεσσάρων, *dia tessarôn,* i. e. the note arrived at by passing "through four," (so named, as by the moderns, on the principle of counting the notes, the Key-note being always counted as first or *one.*) The Fifth in the Canon, is *hypatá mesôn;* the Fifth the combination or interval, is διὰ πέντε, *dia pente,* "through five." The Octave in the Canon, is *mésé;* the Octave the combination or interval, is διὰ πασῶν, *dia pasôn,* "through all." Sounds that are Octaves to each other are also called ἀντίφωνοι, *antiphoni.*

terval arrived at by taking first one interval,—and then the other, commencing from the sound arrived at by the first. For example, if a Fourth is made to the whole or open string by stopping it at three-fourths of its whole length from the bridge,—and if to the sound thus produced, a Major Third is made by stopping the string again at four-fifths of the actual distance from the bridge,—what sound is it that is arrived at, with relation to the sound of the open string? And the rule is, to *multiply* the measures together, and the product will be the measure of the sum.* For ¾ expresses the portion of the open string which is measured from the bridge in order to produce the Fourth; and to make a Major Third from this, there must be taken ⅘ of the remainder. The length therefore finally arrived at, will be ¾ multiplied by ⅘; which is ⅗. But ⅗ is the measure of the Major Sixth. It follows therefore that the sound arrived at by taking first a Fourth and then a Major Third to that, is the Major Sixth.'

'By finding the *difference* of two intervals, is meant ascertaining the interval between the two sounds which respectively result from making the two first-named intervals from some common starting-place. For example, if a string of the Guitar is stopped at three-fourths of its length from the bridge, there results the Fourth to the sound of the open string; and if it is stopped at three-fifths, there results the Major Sixth;—and the question is, what kind of interval is there between this Fourth and Major Sixth? Is it, for instance, the kind of interval that has been called a Minor or a Major Third, or any other of the marked and decided intervals? And the rule is, to *divide* the smaller measure by the greater, and the quotient will be the measure of the difference.* For since the measures express the comparative lengths of string which produce the two sounds, the proportion between these measures must be the *ratio* of the interval, and consequently the smallest divided by the greatest must be its *measure.* Thus the measure of the Fourth is ¾ and that of the Major Sixth is ⅗; consequently the proportion between the length of string which produces the Major Sixth and that which produces the Fourth, (or in other words the *ratio* of the interval between the Fourth and the Major Sixth), is that of ⅗ to ¾;—and ⅗ divided by ¾ (which makes ⅘) is the *measure.* But ⅘ is the measure of the Major Third. It follows therefore that the interval between the Fourth and the Major Sixth, is equal to a Major Third.'—*p.* 4.

These details may be very unnecessary to proficients. But the musicians have been of all men the most unfortunate in their attempts to make their science intelligible; and without an understanding on these preliminaries, it is vain to proceed.

Before examining the intervals among the Consonances, an account is given of what will be called the "Index Scale;"

* For the benefit of those not familiar with such operations, one vulgar fraction is multiplied by another, by multiplying its upper term by the upper term of the other, and its lower by the lower. And to divide one vulgar fraction by another, invert the terms of the last, and then multiply as before. To turn a vulgar fraction into a decimal, add ciphers to the upper term, and divide by the lower.

a contrivance which has a powerful effect in facilitating the estimation of intervals. If a string is shortened by a certain portion of its length, as for instance one-third, and the remainder is shortened by the third part of its own length again, and so on,—it is plain that the sounds produced by stopping the string at these several places in succession, will increase in shrillness by the same interval successively,—which in the given case happens to be a Fifth. And in the same manner if the string was successively shortened in any other proportion. Hence it is plainly possible for a string to have ten, twenty, or any other number of divisions between the head and the middle point or place of the Octave, of such a nature as to make equal intervals of sound when the string is stopped at the several points of division in succession. For all that is necessary for this purpose, is that the proportion of the whole string to the length at the first division from the head, shall be the same as of the length at the first division to the length at the second, and so on throughout; which is easily accomplished with the help of a table of logarithms.

'This facility of dividing *A O* [the half of the string which is between the head, and the point where it is stopped to make the Octave] into any number of equal musical intervals, has led to the observation, that if it is divided into *fifty-three*, and placed by the side of the Harmonical Canon or true division of the string [as is done in a Plate], there is a remarkable degree of correspondence between the divisions of this scale of Fifty-three, and those of the Harmonical Canon; in as much as all the Consonances in the Canon agree, within a small difference, with some of the divisions of the other. But the curious and valuable fact is, that the indications with respect to the comparative magnitude of the intervals, which are drawn from the divisions of this Scale of Fifty-three, are found upon trial to be true of the correct intervals of the Harmonical Canon. The Scale of Fifty-three may therefore be applied as a mechanical method of investigating and recollecting the intervals in the true Canon; and it will be spoken of henceforward under the title of the *Index Scale**.'

'In this it is not meant to be asserted that the indications to be

* Observe here, that nothing is done like falling into the divisions of the Scale of Fifty-three equal intervals, as was carelessly assumed by a writer on the subject. The divisions of that Scale are merely used as a kind of artificial memory, in consequence of the observation that what holds good of these, holds good, to an almost inexhaustible extent, of the True divisions also.

Nothing can better illustrate this, than recounting the way in which the application was first hit upon. The author had determined to construct a Guitar having the neck divided into fifty-three equal intervals, and with separate and moveable frets for each string, to fix into any of the fifty-three degrees by means of holes like those in a cribbage-board. In this manner he expected to indulge himself with hearing the effects of the grave and acute Dissonances in their proper places in a single key, and a division approximating to accurate on any prepared change of key; for it was plain that by merely committing to

drawn from the Scale will be true to an unlimited extent, or under all imaginable circumstances of the composition and division of intervals; for this is manifestly impossible. But only that they are true in the cases to which they are hereafter applied; the verification of which must depend on experiment.'—*p.* 4.

The divisions or *degrees** of the Index Scale are numbered from the head of the string; and it appears to require no great effort, to remember that the degrees which respectively approximate to the measures of the Consonances in the true Canon, taken in order, to wit, Minor Third, Major Third, Fourth, Fifth,

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memory the number of degrees that constituted the respective intervals, (as, for instance, that the grave Second was at eight degrees, the acute Second at nine, the Minor Third at fourteen, the Major Third at seventeen, &c.) he could begin upon any degree on any string, and arrange the frets for the execution of whatever might be desired. In the progress of this, it occurred to him to try what would be the difference of substituting the True or mathematically correct divisions, and how far the places where these true divisions fell on commencing the calculations from some of the previously established divisions as required in changes of key, would differ from those of the Scale of Fifty-three equal intervals, and from each other. His expectation was, that the True divisions, though they would never fall far from one of the degrees of the Scale of Fifty-three, would in the prosecution of different changes of key sometimes fall a little on one side and sometimes on the other. Instead of which, he was agreeably surprised to find that the True divisions fell over and over upon identically the same place in the neighbourhood of the degree of the Scale of Fifty-three, with a pertinacity which though not unlimited in extent, was truly astonishing; and that consequently, within such limits, it was as *cheap* to make a neck with divisions which should be the mathematically perfect ones, as with those of the Scale of Fifty-three. And the same numbers committed to memory which served to regulate the one, would regulate the other. Hence the employment of the "Index Scale," and the construction of the Enharmonic instrument.'—*Added on republication in* 1839.

* Division of the octave into Fifty-three equal musical intervals; the whole string being represented by unity or 1.

Head	1·000000	20	·769846	40	·592663
	·987009		·759847		·584962
	·974183		·749970		·577362
	·961525		·740226		·569860
	·949032		·730608		·562456
5	·936701	25	·721115	45	·555148
	·924530		·711746		·547935
	·912518		·702498		·540851
	·900661		·693371		·533788
	·888959		·684361		·526853
10	·877409	30	·675470	50	·520007
	·866009		·666693		·513257
	·854756		·658030		·506582
	·843654		·649481	Octave	·5
	·832689		·641042		
15	·821869	35	·632713		
	·811191		·624492		
	·800651		·616378		
	·790248		·608369		
	·779980		·600465		

Minor Sixth, Major Sixth, and Octave,—are* the degrees 14, 17, 22, 31, 36, 39, 53; which numbers are in consequence called the *indices* of those respective sounds. Whoever can remember these, with a few more to be hereafter added to express the Seconds and Sevenths, will have mastery over the instantaneous calculation of all the intervals existing between the different sounds in the Canon or their repetitions in other octaves. For example, if it is desired to know what is the interval between the Fourth and the Major Sixth; 22 from 39 leaves 17, which is the index of the Major Third; and it will be found perfectly and mathematically correct, that the interval between the Fourth and the Major Sixth is a Major Third. Or if it is desired to know the sum of a Fifth and a Minor Sixth (in other words what sound will be arrived at by taking first a Fifth, and then a Minor Sixth to that); 31 and 36 make 67, the excess of which above 53 is 14, which is the index of the Minor Third, and the sound will be found to be correctly the Minor Third in the second octave;—and the like in other cases. When, indeed, the string comes to be re-divided by beginning afresh at some of the points of division previously established (which is what constitutes *changes of key*), on carrying the process to a great extent the application of the indices at last begins to fail, by the apparition of *two sets* of measures on certain degrees; though even then, it is a most orderly disorder, as will be seen. But in all that relates to the divisions of the simple Canon and any of its octaves, the application is unfailing. If there is any novelty in this, it is a kind of treasure to all who busy themselves with comparing intervals and poring over the Monochord.

'Since one division or *degree* of the Index Scale expresses an equal musical interval in any part of the string, it follows that three, five, or any other given number of degrees taken together, will do the same. The first indication therefore that is presented by the application of this Scale to the Canon, is that there are several intervals among the Consonances, which are equal to each other. Which it will be proceeded to verify.'

'The smallest intervals that appear among the Consonances, are those represented by *three* degrees of the Index Scale. The first is that which lies between the Minor and the Major Third (or between the *indices* 14 and 17). The length of string which produces the Major Third, is four-fifths of the original string; or if the original length of the string is supposed to be always twenty-five inches (which is the ordinary length of a string on the Guitar), it will be *twenty*

* The measures of the Consonances in the true Canon, are ·83$\overline{3}$ ·8 ·75 ·6$\overline{6}$ ·625 ·6 ·5; as may be gathered from the ratios in page 108 by division. The horizontal line over some figures, indicates a recurring decimal.

inches. The length of string which produces the Minor Third, will on the same supposition be five-sixths, or *twenty inches and five-sixths of an inch.* Hence the proportion of these lengths to each other, will be that of 20 : 20⅚. Or, multiplying both by 6, as 120 to 125. Or, dividing by 5, as 24 : 25; which is consequently the ratio of the interval.'—*p. 4.*

The same result might have been obtained by the subtraction of intervals; but this is given as more impressive. By proceeding in the same manner it is ascertained, that the next interval of three degrees, or that which lies between the Minor and Major Sixth, possesses exactly the same ratio of 24 : 25. These two intervals therefore are accurately equal. And they are the intervals between a note and its Sharp or Flat in the same key.

'This interval will in the sequel be called a *Subtone.* The object of which is to get rid of the deceptive term Semitone; which owes its existence only to the barbarous invention of Temperament.'—*p. 5.*

The next kind of intervals are those represented by *five* degrees, and which appear between the Major Third and the Fourth, and between the Fifth and the Minor Third. And these two, by proceeding as before, are found to have one and the same ratio, viz. that of 15 to 16. This kind of interval is christened the *Limma**. Of course the two intervals of *eight* degrees, which lie between the Minor Third and the Fourth, and between the Fifth and the Major Sixth, are equal to one another, as being the sum of the equal intervals of three and of five degrees. And by proceeding as in the former cases, the ratio of this interval of eight degrees is found to be that of 9 : 10. This kind of interval is called the *Small Tone.* Finally the interval of which a solitary instance appears in the centre of the Canon between the Fourth and Fifth, is represented by *nine* degrees; and by proceeding as before, its ratio is found to be that of 8 to 9. This interval is called the *Great Tone.* The difference between a Great and a Small Tone is a *Comma*†; and its ratio is found by the same kind of process to be that of 80 : 81.

It seems necessary to show cause for giving the name of Third to *two* notes; and the same of the Sixth.

'It will have been observed, that among the Consonances there are two notes under the name of Third, and two of Sixth; of which one is called the Minor and the other the Major. The reason of their being both called Thirds, and both Sixths, is, that it is found by experience that both notes of the pair are not ordinarily in use at the same time; but that the flatter or Minor set is used for a Third and a

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* The Greek word *Limma* or *Leimma* (λεῖμμα) means *remainder.*

† The Greek word *Comma* (κόμμα) means *a clipping, or cutting snipped off.*

Sixth in certain tunes or airs, and the sharper or Major set in others. And the employment of one set or of the other, is found to produce two different kinds of musical effect; the character of the Minor set being plaintive, while that of the Major is lively.'

'When the Minor set of these notes is employed, the whole succession of notes, including the Fourth and Fifth, is called the Minor series; and when the other, the Major.'—*p.* 5.

The next object is to discover the remaining notes of the Canon, or those which *do not* make Concords with the Key-note.

'It is evident that the Consonances leave a vacuity at each end of the Canon, of greater magnitude than any of the intervals which take place among contiguous Consonances. It is reasonable therefore to try, whether by the application of intervals similar to those discovered among the Consonances, these vacuities can be filled up with notes which though they do not form harmonious combinations with the Key-note, shall form some with the notes already established under the title of Consonances, and with one another.'

'Notes of this kind are called *Dissonances*. Which does not mean that they are notes unmusical or out of tune, but only that they do not form harmonious combinations with the Key-note; in contradistinction to the *Consonances* which do.'—*p.* 5.

'If two notes having one of the intervals which constitute a Dissonance are sounded together, the combination of sounds is called a *Discord*.'—*p.* 6.

The principle, therefore, on which the Dissonances are to be sought to be established, is that they are to divide the vacant spaces into intervals like those discovered in other parts of the Canon, and are (so far as possible) to form Concords with the Consonances and with each other. And here the facility of estimating intervals which is derived from the use of the Index Scale, leads to the interesting observation (as the Americans are accustomed to say, "if true,"), that the Dissonances are all *double*, the two sets differing by a Comma; and that the flatter set *rhymes* or makes Concords with the Fourth and Sixth, and the sharper set with the Third and Fifth. On which in the way of artificial memory it may be noted, that the flatter set makes Concords with the Consonances of *even* name, and the sharper with those of *odd*.

'By adding a Tone to the Minor and the Major Sixth, there will be obtained a Minor and a Major Seventh; and by analogy, by subtracting a Tone from the Major and the Minor Third, there will be obtained a Major and a Minor Second*. But as the Tone may either

* 'The existence of a Minor Second is clearly pointed out by analogy; though it appears to have been in a great degree overlooked by writers on the theory of music. Its existence, however, is easily traceable in practice. It is oftenest discoverable in Chromatic passages (of which anon), and in changes from the Major to the Minor Series; and many passages of these kinds are irreducible

be the Small or the Great one, these Dissonances will all be *double;* and of their two forms, that particular one must be employed which makes harmonious combinations with the notes with which it happens to be associated.'—*p.* 6.

The flattest of the two forms should be called the *Grave*, and the sharpest the *Acute;* which may be expressed in writing by the marks ` and ' over the name of the note (as A`, A', &c.), being the same that are applied by grammarians and printers to express the respective accents of those names. The Grave sounds may be expressed in musical notation when desired, by drawing a short line in the direction of the Grave accent, obliquely through the head of the note; which may be added to any printed music with a pencil. As the Grave sounds are on the whole of rarest occurrence*, it will be enough for ordinary purposes to mark the Grave, leaving the unmarked to represent the Acute; but if a desire to mark the Acute should ever arise, it can be effected by drawing the line through the head of the note in the direction of the Acute accent.

'By the addition of intervals in manner as pointed out, a Small and a Great Tone respectively added to the Minor Sixth, give ($\frac{5}{8}\times\frac{9}{10}=\frac{9}{16}$) 9 : 16 for the ratio of the Grave Minor Seventh, and ($\frac{5}{8}\times\frac{8}{9}=\frac{5}{9}$) 5 : 9 for the ratio of the Acute Minor Seventh; of which the Grave makes an exact Fourth with the Fourth previously established in the scale ($\frac{3}{4}\times\frac{3}{4}=\frac{9}{16}$), and the Acute makes an exact Fifth with the previously established Minor Third ($\frac{5}{6}\times\frac{3}{5}=\frac{5}{9}$), and an exact Minor Third with the previously established Fifth.'

'A Small and a Great Tone respectively added to the Major Sixth give ($\frac{3}{5}\times\frac{9}{10}=\frac{27}{50}$) 27 : 50 for the ratio of the Grave Major Seventh, and ($\frac{3}{5}\times\frac{8}{9}=\frac{8}{15}$) 8 : 15 for the ratio of the Acute Major Seventh; of which the Grave† makes a Superfluous Fourth (i. e. a Fourth increased by a Subtone) with the Fourth previously established in the scale ($\frac{3}{4}\times\frac{3}{4}\times\frac{24}{25}=\frac{27}{50}$), and the Acute makes an exact Major Third with the

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to any key without its recognition. Dr. Burney recognizes its appearance in the works of Handel.'

'Under these circumstances it will in all that follows, be instated in its place in the Canon.'

* A conclusion contrary in some respects was come to at first; but altered on more experience.—1839.

† 'The commonest practical demand for this sound, will be when the Major Seventh is found in conjunction with the Fourth and Grave Major Second of the octave above; as for instance in the chord $\begin{matrix}\text{F}\\ \text{D`}\\ \text{B`}\end{matrix}$ in the key of C, where both D and B must be the Grave forms of the Dissonances, in consequence of their connexion with the Fourth of the key, the D` making a perfect Minor Third below the F, and the B` a perfect Minor Third below the D`.'

'In this there may be a degree of anticipation (which it is difficult always to avoid). But the matter will be obvious on familiarity with the subject at large.'

established Fifth ($\frac{3}{2}\times\frac{4}{3}=\frac{8}{13}$), and an exact Fifth with the established Major Third.'

'In the same manner by the subtraction of intervals, a Small and a Great Tone respectively taken from the Major Third, give ($\frac{5}{4}\times\frac{9}{8}=\frac{8}{5}$) 8 : 9 for the ratio of the Acute Major Second (being, in fact, a Great Tone from the Key-note), and ($\frac{5}{4}\times\frac{8}{9}=\frac{9}{10}$) 9 : 10 for the ratio of the Grave Major Second (being the Small Tone from the Key-note); of which the Acute is an exact Fourth below the Fifth previously established in the scale ($\frac{3}{2}\times\frac{4}{3}=\frac{8}{9}$), and the Grave is an exact Minor Third below the established Fourth ($\frac{4}{3}\times\frac{8}{9}=\frac{9}{10}$), and an exact Fifth below the established Major Sixth ($\frac{5}{3}\times\frac{3}{5}=\frac{9}{10}$).'

'A Small and a Great Tone respectively taken from the Minor Third, give ($\frac{6}{5}\times\frac{10}{9}=\frac{25}{27}$) 25 : 27 for the ratio of the Acute Minor Second, and ($\frac{6}{5}\times\frac{9}{8}=\frac{15}{16}$) 15 : 16 for the ratio of the Grave Minor Second (being, in fact, a Limma from the Key-note); of which the Acute* is a Superfluous Fourth below the established Fifth ($\frac{3}{2}\times\frac{4}{3}\times\frac{25}{24}=\frac{25}{18}$), and the Grave is an exact Major Third below the established Fourth ($\frac{8}{4}\times\frac{4}{5}=\frac{15}{8}$), and an exact Fifth below the established Minor Sixth ($\frac{8}{5}\times\frac{3}{2}=\frac{15}{16}$).'—*p.* 7.

An important addition, is the sound called the *Tritone*.

'The interval called a *Tritone*, is a Limma less than the Fifth. It has no place in the Canon; for no sound ever falls upon it except in consequence of a change of key, when it is in fact one of the ordinary notes of the Canon, only the Canon has been begun upon a different sound,—as will be explained hereafter. There is however a practical use in knowing how to delineate such an interval. Its ratio ($\frac{3}{2}\times\frac{16}{15}=\frac{32}{45}$) is that of 32 : 45; and it is indicated by 26 degrees of the Scale,—which makes it necessary to be careful not to confound it with a Superfluous Fourth, which would be indicated by 25.'—*p.* 7.

The fact is, the Tritone performs a *grand rôle*. It presents the sound which, though not existing in the simple scale, is the first that is required under the commonest changes of key; and it supplies the sound which is wanting between the Fourth and Fifth to complete the correspondence with the vulgar notation.

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* 'The readiest way of supposing a demand for this sound (which is practically of comparatively rare occurrence) would be if the Minor Second should be called for in conjunction with the Fifth and Acute Minor Seventh of the octave below; as for instance in the chord $\begin{matrix}F'\\D'\\B\end{matrix}$ in the key of E minor, where both D and F must be the Acute forms of the Dissonances, in consequence of their connexion with the Fifth of the key, the D′ making a perfect Minor Third above the B, and the F′ a perfect Minor Third above the D′.'

'In this there is the same degree of anticipation as in the previous note. And by an extension of the same privilege; this may be the place for hinting the suspicion, further dwelt on in the sequel, that the Minor Second is really a component part of the Minor series of sounds as much as the Minor Seventh, though composers have the right of employing the Major instead of it as often as they please, as is the case with the Seventh.'

The Table below contains the divisions in the simple octave, with the addition of the Tritone; to which are added their correct measures in decimals, and their *indices* in the Index Scale. This may be called the *Harmonical Canon**.

'If it is asked, as has often been done, why the sounds produced by the ratios of 4 to 7, 5 to 7, 6 to 7, and 7 to 8, are not in the Canon, though the ratios are simpler than those of many that are there,—the answer seems to be, that it is because they present intervals dissimilar to those existing among the other notes, and are consequently incapable of making harmonious combinations with them. They are wheels, but not wheels that will fit in with the rest of the machine; and therefore they are of no use†.'—*p.* 7.

Chapter the Eleventh is on the connexion between Harmony and Melody.

'The ancients, by *Harmony* meant only being in tune‡. But the moderns have appropriated the term to the combination of such sounds

*HARMONICAL CANON.

Index	Name of Sound.	Measure.
0	Key-note.	1·
5	Grave Minor Second	·9375
6	Acute Minor Second	·925925
8	Grave Major Second	·9
9	Acute Major Second	·88
14	Minor Third	·833
17	Major Third	·8
22	Fourth	·75
26	*Tritone.*	·711
31	Fifth	·66
36	Minor Sixth	·625
39	Major Sixth	·6
44	Grave Minor Seventh	·5625
45	Acute Minor Seventh	·55
47	Grave Major Seventh	·54
48	Acute Major Seventh	·533
53	Octave	·5

A horizontal line over any number of figures, intimates that such figures form a recurring decimal.

† Tartini wanted to introduce the sound produced by the ratio of 4 to 7, under the name of *za;* being no other than the first of the anomalous sounds extracted by beginners from the Bugle or Trumpet.

'‡ Ἁρμονία (*harmonia*) is from ἁρμόζω *aptè connecto;* which is from ἄρω, *apto.* SCHREVELIUS. It means therefore the sounds being adjusted to their proper proportions, or what we call being in tune; and is equally applicable to a succession of single notes, or to the sounding of several simultaneously.'

'In accordance with this, is Euclid's definition at the beginning of his "Introduction to Harmonics." Ἁρμονική ἐστιν ἐπιστήμη θεωρητικὴ καὶ πρακτικὴ τῆς τοῦ ἡρμοσμένου φύσεως. Ἡρμοσμένον δέ ἐστιν τὸ ἐκ φθόγγων καὶ διαστημάτων, ποιὰν τάξιν ἐχόντων, συγκείμενον. "Harmonics, are the theoretical and practical knowledge of the nature of being in tune. And being in tune, means being composed of sounds and intervals possessing a certain order."

'By Μέλος, Μελῳδία (*Melos, Melodia,*) the ancients appear to have meant Musical Construction in general; and what they called harmony was a part of

as are agreeable when heard simultaneously; while they use *Melody* for the arrangement of such sounds as are agreeable when heard in succession.'

'The same scale of sounds which enables us to produce Harmony, produces Melody. The difference between the sounds uttered in the attempt to sing by a person who has not a musical ear and one who has, is that the sounds of the first are not in the intervals of the scale which produces Harmony, and those of the other are.'

'The reason why the intervals that produce harmony produce also melody, seems to be, that *melody is retrospective harmony*, or depends on a perception of harmonical relation to sounds that have preceded. And it appears to be no objection to this, that some persons—as is supposed to have been the case with some of the ancients—are acquainted with the practice of melody, but not of harmony or music in parts. For their not being acquainted with the practice of harmony in its modern and most extended sense, does not prove that their consciousness of the effects of melody is not dependent on a perception of harmonical relation to sounds that have preceded.'

'The connexion between harmony and melody is no where so apparent, as in the *Arpeggio* passages so common in music for the Guitar and stringed instruments in general. For these Arpeggios are in fact chords, spread out by the notes being sounded in succession instead of together, as the means of obviating the want of *sostenuto* tone inherent in the instrument. And no person can for an instant doubt, that the composition of these Arpeggios—in respect, for instance, of the determination of the form of a Dissonance—ought to be the same as if the notes were to be sounded together as a chord.'

'The same connexion which exists in the most striking degree among the notes of an Arpeggio, exists in a certain degree among all others. The memory of the sounds that have preceded lingers in the ear, and requires to be accommodated as far as possible, by meeting with harmonious combinations in those that follow. The rule

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it. Thus Aristoxenus begins his work on Harmonics, Τῆς περὶ μέλους ἐπιστήμης, πολυμεροῦς οὔσης, καὶ διῃρημένης εἰς πλείους ἰδέας, μίαν τινὰ αὐτῶν ὑπολαβεῖν δεῖ, τὴν ἁρμονικὴν καλουμένην, εἶναι πραγματείαν, τῇ τε τάξει πρώτην οὖσαν, ἔχουσάν τε δύναμιν στοιχειώδη. "Since the science of Musical Construction (*Melos*) consists of a number of parts, and is divided into several branches, it is necessary to set out with observing, that the particular one which is known by the title of Harmonics [*or relates to the nature and properties of being in tune*], is the first in order, and is of the most elementary nature." And a few lines further on, Καί τοι τὰ διαγράμματά γε αὐτῶν ἐδήλου τὴν πᾶσαν τῆς μελῳδίας τάξιν. "And their scales [*or calculations*] have displayed the whole order of musical construction."

'It has been the subject of much dispute, whether the ancients were acquainted with what the moderns call harmony, or music in parts. And the result seems to be, that though they sang in Octaves (which in Greek was called μαγαδίζειν) and in Double Octaves, and in the time of Plutarch sometimes introduced the Fifth or the Fourth by way of accompaniment,—they never made a science of simultaneous harmony, in the way that has been done by the moderns. (Burney's Hist. of Music. Vol. I. Section VIII.—Aristot. Problem. xix. 18. 34.—Plutarch. de *EI* apud Delph. Tom. I. p. 649, Edit. Hen. Steph.)'

therefore for the determination of a Dissonance in a simple melody, is to make it form a harmonious combination or Consonance with the nearest preceding note that admits of one; in the same manner that would be done if they were to be sounded together. And where there has been no such preceding note at all,—as for instance at the beginning of a melody,—then the rule might possibly be, that the Dissonance should make a harmonious combination with the nearest *following* note that will admit of one. But if instead of a simple melody there is an accompaniment of some kind, as for instance a bass,—then the Dissonance must be determined by what will make a harmonious combination with the note that is to be sounded simultaneously. For the connexion with this note is evidently more immediate, than with any that is sounded either before or after.'—*p.* 7.

A passage which follows, presents the clue which has manifestly led to the discovery of the *duplicity* of the Dissonances; though as it stands, the cause and consequence may be said to have changed places.

'This principle of the determination of Dissonances explains the fact long observed by singers, that in running along the notes of the Major series in the descending scale, the Second is flattened by a Comma, or is made the Grave one. For the nearest preceding note that admits of a harmonious combination, is the Fourth; and to make a harmonious combination with the Fourth, the *grave* Second is required. The difficulty therefore is to know, why the *acute* Second should be used in running *up* the scale, as is implied to be the practice; unless it has been preceded by the Fifth and acute Seventh in the octave below, or is attended in the shape of an accompaniment by some note that demands the other form. For otherwise, there appears to be no reason why the acute Second should be used in ascending; to the certainty of making an inharmonious interval with the Fourth that is to come after it.'—*p.* 7.

Almost every reader will here be struck with the probability that some principle of concordance with a preceding or following sound, like that which determines the form of a Dissonance, will explain the fact of the Major Seventh being used instead of the Minor, in *ascending* in the Minor series. But no such reason seems to be discoverable; the reason therefore is still a mystery*.

What is true of the Minor and Major Seventh, may be suspected, from analogy, to be true of the Major and Minor

* A late Mathematical Professor in the University of Cambridge, who was well acquainted with the theory of sounds though deprived by nature to an uncommon degree of what is called a musical ear, used to triumph over the Professor of Music, (both, now, among the memories of other years), because when he demanded the reason of this introduction of the Major Seventh in ascending, the musician could only reply "it was because the ear required it." In this state, however, the question appears to rest.

Second. But an examination of the passages in which the Minor Second occurs (which, though not frequent, are still to be discovered), appears to lead to the conclusion that in the Minor series the Minor Second is seldom used but in *ascending*, and the Major in *descending*. So that the result seems to be, that in ascending in the Minor series, the two Dissonances have a tendency to move outwards or *from* the centre of the Canon; and the contrary in descending. A curious additional instance of the tendency of the musical intervals to preserve a uniformity of relation to the centre, or to the two ends, of the octave*.

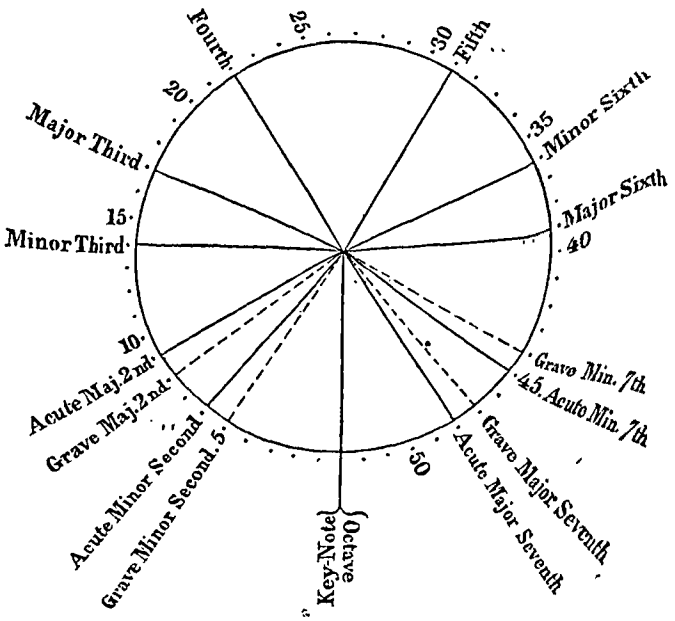
'What are called Chromatic† passages, are or ought to be, a succession of sounds in both the Minor and Major series of the same key; as for instance A, B ♭, B, C, C ♯, D, E, F, F ♯, G, G ♯, A, or in the contrary order. Passages of this kind almost always begin on the Key-note, and include the Minor Second. If a Sharp on the Fourth appears, it is the *Tritone*, and indicates a change of key to that of one additional Sharp; and the chromatic sounds that next follow, require no alteration to be in tune.'—*p.* 6.

The intervals in the true Canon make a striking appearance when exhibited by taking the circumference of a circle to represent the whole octave, and dividing it (as is easily done by the aid of logarithms) in such manner that equal intervals shall be represented by equal portions of the circumference, and others in proportion; and then drawing straight lines from the centre to such points of division, distinguishing the *Grave* forms of the Dissonances by making the lines broken. As an aid to comparison, the whole circumference should be also divided into 53 equal parts, which being numbered will represent the degrees of the Index Scale; of which some one or other will so nearly coincide with each division of the true

* If the existence of the Minor Second is conceded, it will lead to the conclusion that there ought in strictness to be another flat in the signature in the Minor series; and, by consequence, that the key of E minor, and not A minor, ought to be written with all natural notes, or without either flats or sharps in the signature. It seems however to be of little consequence which of the two is practised. In fact, as the occurrence of the Minor Second in the Minor series is rarer than that of the Major Second, there is less trouble in writing B ♭ when it happens to be called for, than in writing nearly all the Seconds in the key of A minor with the mark ♮.

† '*Chromatic* is from χρῶμα (*chroma*) *colour;* and seems intended to apply to something that is altered by successive shades or gradations. Ὡς γὰρ, τὸ μεταξὺ λευκοῦ καὶ μέλανος χρῶμα καλεῖται· οὕτω καὶ τὸ διὰ μέσων ἀμφοῖν θεωρούμενον, χρῶμα προσείρηται. "As what lies between white and black is called *chroma* (colour); so what makes its appearance between pairs of other things, has the term *chromatic* applied to it."—*Aristid. Quintil.* L. I. p. 18. Ed. Meibomii.

Canon, as to be not distinguishable upon a visual representation like the present. The result may be called the *Harmonical Circle.*



'The Harmonical Circle presents an accurate visual representation of the relative proportions of the intervals to each other; and at the same time demonstrates by inspection, the succession and alternation of intervals described. The middle of the octave is seen occupied by the interval called the Great Tone, and the two *wings* or portions of the octave which lie on different sides of the great central interval, are similarly divided each way from the centre towards the ends; the intervals belonging to the Minor and Major series alternating, and changing at the centre*. Each wing consists of a Fourth, or as it was called by the ancients, a Tetrachord. And the tetrachord, like the octave, (with the help of the divisions of the Double Dissonances) is divisible into a central interval larger than the rest, and successive

* 'By changing at the centre, is meant that an interval produced by a note of the Minor series lies next to the central interval on one side, and of the Major series on the other.'

intervals on different sides of it respectively equal. All of which are very curious analogies, presenting remarkable indications of regularity and design; and affording a wonderful exemplification of the powers and properties of numbers, whereby so complicated and yet regular a system can be formed out of the simple ratios*.'—*p.* 8.

The Twelfth Chapter is "On changes of Key, and the Compound Intervals produced in consequence."

'By playing in any particular key, as for instance the key of A, is meant, that the length of string which produces the note called A upon the instrument, is taken for the first note of the Canon, or the Key-note,—and that the other notes, as B, C, D, &c., are made to possess their just sounds, by dividing the string A in the canonical proportions.'

'The ancient Greeks expressed this very forcibly, by calling the Key-note *Proslambanomenos* (προσλαμβανόμενος); by which they meant, the length of string *taken to begin with.* And the definition of a change of key is, that a new portion of the string is made *Proslambanomenos*, or is taken to begin with in the calculation of the canonical divisions†.'

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* 'Correct Division of the Harmonical Circle.'—*p.* 25.

	°	′	″		°	′	″
Key-note	0	0	0	Fifth	210	35	11·4
Grave Minor 2nd . .	33	31	9·8	Minor Sixth	244	6	21·2
Acute Minor 2nd . .	39	58	16·6	Major Sixth.	265	18	27·4
Grave Major 2nd . .	54	43	16	Grave Minor 7th . .	298	49	37·2
Acute Major 2nd . .	61	10	22·8	Acute Minor 7th . .	305	16	44
Minor Third	94	41	32·6	Grave Major 7th . .	320	1	43·4
Major Third	115	53	38·8	Acute Major 7th . .	326	28	50·2
Fourth.	149	24	48·6	Octave	360		

† 'This changing of the place of the *Proslambanomenos* or Key-note is very clearly described by the ancients. Οἷον, ποτὲ μὲν τὸν φύσει βαρύτατον φθόγγον προσλαμβανόμενον, ὡς ἐν τῷ ὑποδωρίῳ τρόπῳ, τιθέμεθα, καὶ μέσην τὴν πρὸς τοῦτον ἀντίφωνον, καὶ τοὺς ἄλλους κατὰ τὴν πρὸς αὐτοὺς σχέσιν ὀνομάζομεν· ποτὲ δὲ αὐτὴν μέσην, τὴν νῦν ἀντίφωνον τῷ προσλαμβανομένῳ, ἐν τάξει προσλαμβανομένου ὑμνοῦσι, καὶ τὴν ταύτης ἀντίφωνον μέσην ὑποθέμενοι, καὶ τοὺς ἄλλους τούτοις ἀνάλογον, οὕτω χρώμεθα τῷ παντὶ συστήματι. πολλάκις δὲ καὶ τὸν μεταξὺ προσλαμβανομένου καὶ μέσης ἵνα τινὰ παραλαβόντες, εἰς ἀρχὴν τοῦ συστήματος, πρὸς τοῦτον ἁρμόζομεν. ἀνάγκη δὲ ἑφ' ἑκάστου συστήματος, πλειόνων προτεθέντων συστημάτων, ὡς ἡ μέση πρὸς τὴν μέσην ἔχει, ἢ ὡς ὁ προσλαμβανόμενος πρὸς τὸν προσλαμβανόμενον, οὕτως ὀντιναοῦν τῶν ὁμωνύμων ἔχειν πρὸς τὸν ὁμώνυμον, καὶ ἅπαν τὸ σύστημα πρὸς ἅπαν τὸ σύστημα. "Sometimes we take for *Proslambanomenos* the sound which is naturally the deepest [*viz. the sound of the whole or open string*], as is done in the Hypodorian mode, and for the Octave the sound which makes that concord with it; and the other sounds we name according to their relation to these two. And sometimes we take the Octave, or the note which makes that concord with the actual

'' At the same time this new length of string is not taken at hazard, but is itself determined by some or other of the canonical proportions; in consequence of which a number of striking effects are found to be produced. It is a sort of building one pile of harmony upon another pile; in which it is easy to imagine that the effect may depend on the foundation of the new pile bearing some definite relation to that of the old.'

'For example, in playing in the key of A and changing to the key of D (as happens when there is a change from three sharps to two)—what is done or ought to be done is, that the length of string which sounds D to the original A, (being, by reference to the Harmonical Canon, three-fourths of the string that sounded A), is made into a new *Proslambanomenos*, and the canonical divisions calculated afresh upon this new foundation or Key-note.'

'It will be perceived by application to the Index Scale, that the divisions of the string arising from this new calculation, will be only imperfectly represented by the divisions of the old. A great many will be found to be represented; but some of them will not. It follows therefore that it will not be enough, to take the notes of the old key for those which they may be nearest to in the new.'—*p.* 8.

'The new divisions necessitated by the changes of key, create a number of intervals that may be called *Compound*; because they do not exist among the divisions of the Canon in its simple state, but only mark the places where these divisions fall at different times, in consequence of the calculation commencing in different parts of the string. These intervals will be best illustrated by being shown on the finger-board of the Guitar.'—*p.* 9.

The confounding these compound intervals with simple ones, is at the bottom of all the outcry raised against the practicability of playing in correct harmony. If a dancer were to perform in a certain order a succession of steps of various lengths (bearing, for instance, some resemblance to the intervals in the Canon as displayed by the Harmonical Circle), and if by giving a circular direction to the dance it should be contrived that one of the dancer's footsteps in going round the second time should fall upon the first of the traces of the old, but that it should not be the *first* step in the figure that so fell but some other,—it is plain that of the traces left on going round the

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Proslambanomenos, and put it for *Proslambanomenos*; taking its Octave for a new Octave, and the other notes in a corresponding manner through all the system. And frequently we take some one note between *Proslambanomenos* and Octave, for the beginning of the system; and tune to this. But it is necessary that in every system, of the many which may be taken, the same relation which exists between the Octave in one system and the Octave in another, and between the *Proslambanomenos* in one and the *Proslambanomenos* in another, should exist between each of the notes of the same name in the two systems respectively, and between the entire of one system and the entire of the other."—*Gaudentii Philosophi Harmon. Introd. p.* 21. Meibomius.

second time, some might coincide with the old, but some would not; and the differences, would be what have been called compound intervals. But it would be a strange and babyish mistake, that should raise a difficulty out of this, and say, "How is anybody to undertake to dance compound intervals?" If the simple intervals are performed correctly, the impossibility with respect to the compound is not in making them, but in *not* making them. They come there of themselves, because they cannot help it. And if there is some instinct, or sense of rhythm and proportion, which directs the dancer to make the simple steps of the various longitudes supposed, there would be no possible way of *preventing* the exact execution of the compound intervals, except by persuading the dancer to do violence to the instinct, and cut and shuffle the different steps into some kind of morbid equality,—*which would be a temperament.* But there is a craft in everything; all the world is mystifying and mystified by somebody. The fact is, that the voice and violin are the only instruments that have perfect command over the power of making the correct simple intervals (or as it is technically called, *just intonation*) in all possible situations and beginning from all possible points*. And the singers and violinists are weak enough to be persuaded to say, "We must sing and play out of tune, or what would become of the players on imperfect instruments?" And the crime of the players on imperfect instruments is, that instead of attempting to remedy their deficiencies, they try to persuade others to reduce themselves to the level of their imperfections. A common chamber organ shall have eight stops, which implies the pipes of eight organs joined in one; yet nobody has thought of making an organ to play correctly in the Major and Minor of three or four of the most closely related keys, though it might be done at less than the expense of an organ with the same number of useless stops. The whole gothicism of temperament, may be suspected to have come in with monks and organs; which is not saying that organs should be abolished, but that they should be made to play in tune in such variety of keys as may be found consistent with practical convenience, and that this is of vastly more importance than being adorned with all the trumpet and hautbois stops that could be found at Haarlem. Humanity dearly loves being in tune; and the first sectarian chapel-owner who shall have the spirit to build an Enharmonic organ at half

* Addition should in strictness be made in favour of the Sacbut or extensible Trumpet (*Sacabuche*, Spanish; from *sacar* "to draw out," and *buche* "throat or stomach"). It is understood that some of the continental musical establishments have formed bands of Sacbuts, tenor and bass.

the expense of one with the ordinary number of useless stops, will find his account in it in the extension of his heresy.

The description of the different kinds of changes of key, presents an instance of the accuracy of the knowledge of the ancients on certain points.

'There seem to be three kinds of changes of key, or as it is called by musicians, *Modulation*. The first may be termed *Consonant;* which is when the place of the Key-note, whether it is changed once or many times in succession, falls on some of the Consonances of the first or original key. And this, as making the most marked and harmonious connexion between the old and the new key, may be considered as the best*, and is also the most usual kind of modulation. The second kind may be termed *Complicated;* and is when, after the Key-note has changed to one of the Consonances of the original key, the next change is to one of the Consonances of the second key but not of the first. As for example, when from the natural key of C the first change is to the key of the Fifth, which is that of G or one sharp,—and the next is to the key of the Fifth of G, which arrives at the key of D or two sharps, being in fact on one of the Dissonances of the original string, the acute Major Second. The third kind may be called *Disorderly;* and is when the Key-note migrates to a Dissonance or some still more irregular interval at once. This last kind is the rarest of all. In all kinds of changes of key, the Key-note ordinarily returns in the end to the place from which it set out.'—*p.* 9.

The "Division of the Enharmonic Finger-board" (Ch. XIII) is a large experiment on the powers of the Monochord, or more properly (if no objection is made to the expression) of six Monochords, which might be taken for the definition of the instrument finally produced. And as this contains the principles which must guide the calculator for every species of Enharmonic instrument, no royal road to familiarity with the subject can be recommended to him, so good as going with his own hand through the whole of the process next described.

'The first object of the Division must be to procure the power of playing correctly in different keys, *one at a time*, by means of a separate arrangement of the frets for each key. The next (which is what is treated of under the head of *Mutations*) is to try to what extent it is possible to provide for changing from one key to another during playing, and without stopping to alter the arrangement of frets.'

'Take a copy of the Harmonical Canon [in page 118], and in the

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' * Μεταβολαὶ δὲ ἐν τοῖς τόνοις γίνονται ποικίλαι, καθ' ἕκαστον τῶν διαστημάτων, τῶν τε συνθέτων καὶ ἀσυνθέτων. ἀλλ' αἱ μὲν ἐκ συμφώνων λαμβανόμεναι διαστημάτων χαριέστεραι. "Changes of key are made in various ways among the notes, upon any of the intervals either compound or the contrary; but those which are made upon Consonances are the most pleasing."—*Aristides Quintilianus de Musicâ. Lib. I. p.* 25. Meibomius.

left-hand margin, opposite to the word Key-note, write with a pencil the name of the note which is to be first taken for the Key-note, as for instance A; and in the same way write B ♭ and B ♭′ opposite to the Grave and the Acute Minor Second, B♮ and B♮′ opposite to the Grave and the Acute Major Second, C to the Minor Third, C ♯ to the Major Third, D to the Fourth, D ♯ to the *Tritone*, E to the Fifth, F to the Minor Sixth, F ♯ to the Major Sixth, G♮ and G′ to the Grave and the Acute Minor Seventh, G ♯ and G ♯′ to the Grave and the Acute Major Seventh, and A again to the Octave. Call this the *Model*.'

'Divide a sheet of paper into six perpendicular columns, to correspond with the six strings of the Guitar; and across these columns rule fifty-three lines, to represent the fifty-three degrees of the Index Scale. Number the lines at the margin towards the left.'

'The sixth or thickest open string is to be E; which on reference to the letters in pencil on the model, appears to be the Fifth. And the next fret or division is to be F, which is the Minor Sixth. By reference to the model, the measure of the Fifth is ·66̄*, and the measure of the Minor Sixth is ·625. Say then, As ·66̄ : ·625 :: 1· (which represents the length of the whole string) : ·9375 the proportionate length required to make F on the sixth string when the whole string is E and the Key-note A.'

'The number of degrees of the Index Scale between the Fifth and the Minor Sixth, is five. On the fifth line therefore from the top of the ruled sheet, and in the left-hand column which represents the sixth string, write F ·9375.'

'The next division is to be F ♯, which is the Major Sixth. By reference to the model as before, the measure of the Fifth is ·66̄, and the measure of the Major Sixth is ·6. Say therefore As ·66̄ : ·6 :: 1· : ·9, the proportionate length required to make F ♯ on the sixth string. The number of degrees of the Index Scale between the Fifth and the Major Sixth, is eight. On the eighth line therefore from the top of the ruled sheet, and in the same column as before, write F ♯ ·9.'

'Proceed in like manner till all the divisions of the octave with the addition of the *Tritone*, are marked on the sixth string. On passing the limits of the letters marked on the model,—as will be the case on going beyond A the Octave, and proceeding to find the place, for instance, of B ♭,—it will be necessary to suppose the representation of a second or shriller octave on the Canon, and to employ the measure of B ♭ in this second octave, which will be found by halving its measure in the other. Whatever relates to the *Tritone*, write with red ink. Distinguish the number on which the Key-note falls (which in the present case will be ·75 on the 22nd line), by a cross or other mark.'

If these proportions are transferred to the finger-board of the Guitar (as will be done by subtracting the decimal fractions found above, from unity or 1, multiplying the remainders by the number of inches in the

* As noted before, a horizontal line over any figures represents a recurring decimal.

open string, and measuring off the resulting lengths from the head of the instrument), it is plain that they will determine the points at which the sixth or E string ought to be stopped when the Key-note is A.'

'The next or fifth string is to be A. Proceed therefore to divide it on the same principles as before; which, as the Key-note happens to be expressed by the whole or open string, will be done by writing off the measures from the model, on the lines corresponding to the degrees of the Index Scale, in the column that represents the fifth string. And it is plain that if these proportions are transferred to the finger-board, the fifth string will only require to be brought into unison with the A as sounded by stopping it at the place previously established for it on the sixth string, for both the sixth and fifth strings to be prepared for playing correctly in the key of A.'

'Proceed in the same manner with the fourth or D string; and it is evident that this string on being brought into unison with the D as sounded by stopping it at the place established for it on either of the preceding strings, will also be prepared for playing in the key of A. And the same with the other strings. When one of the open strings is to express a Dissonance,—as will be the case in the present instance with both the third and second strings, which are the G and B,—make it the *Acute* form and calculate the divisions accordingly. It is unnecessary to write anything in the column which represents the first or thinnest string; because it would be only a repetition of the sixth.'

'When this is done, the sheet will present a plan—or as the ancients would have called it, a *System**—for stopping the strings correctly in the key of A, in either the Major or Minor series.'

'Rub out now the letters in pencil on the model; and prepare for making a system in the key of B ♭, by writing B ♭ opposite to the Key-note, C ♭′ and C ♭ opposite to the Grave and the Acute Minor Second, C′ and C opposite to the Grave and the Acute Major Second, D ♭ to the Minor Third, D to the Major Third, and so on.'

'Divide and rule another sheet of paper as before; and make a *System* for playing in the key of B ♭. In this case the E string will be the *Tritone*, and its divisions must be calculated accordingly. And the second open string will be C ♭′ and not B; because the Minor Second in the key of B ♭, is not B but C ♭.'

'Proceed in the same way till a *System* is made for each of the keys of A ♭, A, B ♭, B, C, D ♭, D, E ♭, E, F, F ♯, G. If Systems are made in the same way for the keys of G ♯, A ♯, B ♯, C ♭, C ♯, D ♯, E ♯, F ♭, G ♭, they will be found identical in point of division with some of the before-mentioned; viz. that of G ♯ with that of A ♭, A ♯ with B ♭, B ♯ with C, &c., one mode of division being common to the two

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'* Σύστημα δέ ἐστι, τὸ ἐκ πλειόνων ἢ ἑνὸς διαστημάτων συγκείμενον. "A System is that which is composed of more than one interval." *Euclid. Introd. Harmon.* Euclid afterwards enumerates several kinds of Systems; so that this is, in the sense of the ancients, a System, though not the only thing so called.

'The scale or table by which any System is represented or written down, was called by the ancients διάγραμμα (*diagramma*).'—*Note in p.* 10.

which are represented by the same sound in the ordinary musical scale, the only difference being in the pitch of the whole. And in the same way if Systems were made for A ×, A ♭♭, &c. they would be identical in point of division with those of B, G, &c. So that the twelve Systems first named, make provision for all possible keys.

'Divide and rule another sheet of paper as before, and collect under their appropriate degrees the whole of the measures found in the Systems hitherto described; marking in the same manner as in the Systems copied from, all those which have ever been made *Proslambanomenos* or Key-note. When measures more than one present themselves for the same degree of the Index Scale, write them one over the other in the order of their magnitudes. Call the result the *Collective System**.

'After all the complications involved, there will be found only five degrees which present two measures. Eight more are without measures at all, and are subsequently supplied with such as appear best calculated to increase the number of measures that may on occasion be taken for the Key-note†.'

'These proportions, transferred to the finger-board, will give the

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* 'This collection of the contents of several Systems into one, may be suspected to be what was called by the ancients Κατασύκνωσις—Κατασυκνῶσαι τὸ διάγραμμα. "Crowding—To crowd or set the scale thick with intervals."—*Aristoxen. Harm. Elem. p.* 7. Meibomius.

"Ἐτι τῶν διαστημάτων ἃ μὲν ἐστιν ἀραιά· ἃ δὲ συκνά. συκνὰ μὲν τὰ ἐλάχιστα, ὡς αἱ δίεσις. ἀραιὰ δὲ, τὰ μέγιστα, ὡς τὸ διὰ τεσσάρων. "Also of the intervals some are thinly set, and some thickly. The thickly set are the smallest, such as *dieses*; and the thinly, the largest, such as the Fourth.—*Aristid. Quintilian. de Musicâ, Lib. I. p.* 14. Meibomius.

† As the choice of these is to a certain extent discretionary, some alterations have been made on the set originally published; besides an inaccuracy corrected.—*Added in* 1839.

'It would be easy to extend the number of bars that may be taken for the Key-note; at the expense of increasing the number of double bars. For example, by increasing the number of double bars to twenty-six (making in the whole seventy-nine divisions in the octave) provision may be made for all the twelve keys and the whole of their *Consonant* modulations; and by the following addition to the empiric rule, the bar may always be determined with accuracy as before. When the Key-note is on one of the bars of a double bar, *all* the canonical numbers which fall on a double bar must take the same kind of bar as the Key-note,—that is, if the Key-note was on the sharpest of the two bars they must all take the sharpest; and the contrary. But in addition to the twenty-six double bars above-mentioned, two more bars (9 and 48) must be made double by means of a blank bar (or one without any *measure* in figures upon it), being drawn *above;* and one more (49) must have a bar of the same kind drawn *below*; which brings the bars thus treated within the compass of the rule. Though there appears to be no use in a complication of this kind for practice on the Guitar, it is matter of considerable curiosity, and may possibly be of service for some purpose at present unthought-of.'

'The same kind of process might be extended, with apparently no assignable limits; and there can be no doubt that by continuing it, the blank bars would in time be supplied with *measures*, and new blank bars necessitated, which would be supplied with measures in their turn. In some such manner it is probable that Asclepiodotus arrived at his reported 220 divisions; and gave up the subject in despair, on finding that he attained to no conclusive or impassable result.'

power of playing in any of the possible keys, *one at a time.* Each measure is made applicable to all the strings, by being drawn across the whole breadth of the neck, the line which marks it being called a *bar.* The bars which may be taken for the Key-note, are distinguished by a × upon the line which runs down the middle of the board, and those which have only a deficiency among the Minor Seconds or the grave forms of the Sevenths, by a ∨ ;—the cases in which a pair of Dissonances is perfect, being at the same time distinguishable by their being distant by a Comma, with which view all the intervals that are Commas have a short horizontal mark across the line which runs down the middle of the board.'

'The practical application of these numerous divisions, is effected by means of short moveable frets of blackened iron, each of which extends only to a single string. So that when the neck is prepared for the execution of any particular key (and still more if all the *first* frets on the respective strings are joined together at their nearest ends with lines of Indian ink, then all the *second,* all the *third,* &c.) it presents to the eye the usual number of frets, but of a zig-zag form. The introduction of the grave and acute Dissonances in the places where they are required, is effected with a facility that could not have been expected, and by what might almost be taken for a kindly provision of nature for the purpose. A fret of different colour from the others (brass), slightly reduced in height so as to prevent the possibility of catching the string improperly, serves to mark the presence of the acute Dissonances where the grave are required for use, and at the same time gives the power of sounding the acute Dissonance when required for tuning one string to another.'

'To those who have gone through the process of calculation described, it will be easy to arrange the frets for any proposed key by the application of the *indices* or canonical numbers; which is called *telling off.* When in the course of this operation a degree falls on a double bar, the bar will be determined by the following easy empiric* rule. The numbers belonging to *the Minor series and the Fourth,* (viz. 5, 6, 14, 22, 36, 44, 45,) take the bar nearest the head, or the *flattest;* and the numbers belonging to *the Major series and the Fifth,* (viz. 8, 9, 17, 31, 39, 47, 48,)—to which may be added the *Tritone* or 26,—take the bar farthest from the head, or the *sharpest.* For the benefit, however, of those who may find it convenient, the keys of A, B, C, D, E, F, G, have the places of their respective frets engraved upon the finger-board, and the remainder have them described in a table.'—*p.* 11.

For the *Collective System* which is the result, see the opposite page.

* An *empiric* rule is one founded upon trial. As long, therefore, as its application is confined to cases where trial has been actually made, it is perfectly legitimate, and might more properly be classed under the head of Artificial Memory than any other.

The most celebrated empiric rule is that known under the name of "The Rule of the Circular Parts," invented by Baron Napier, which solves the sixteen cases of right-angled Spherical Triangles.

made by dividing into three, &c. The sound produced is always the same as would be the sound of one of the aliquot parts, measured from the bridge and stopped by a fret. A result of this is, that no ratios can appear among the Harmonics, but such as have for their first term, 1, 2, 4, 8, or some other of the numbers formed by continued multiplication by 2. The only canonical notes consequently that can appear among the Harmonics, (in addition to an unlimited succession of Octaves), are Acute Major Seconds, Major Thirds, Fifths, and Acute Major Sevenths; but there will be found the Superfluous Fifth and the Tritone, with a number of other sounds describable by the terms Superfluous and Redundant. A knowledge of these points reduces the seeming wilderness of the Harmonics to clearness.

The notes of the Bugle, Trumpet, French Horn, Trumpet-Marine, and Eolian Harp, are Harmonic sounds; the untuneable noises which everybody must remember who has heard an incipient performer on the first of these instruments, being those which are formed by the unserviceable or unsymmetrical ratios. In a subsequent part (§ 251 and following) are calculations interesting to Trumpet players, on the capabilities of their instrument; to which increased importance would be given, if improvements should at any time be made in the construction of musical instruments on Harmonic principles, as for instance by producing the Harmonic sounds in remote octaves from a metallic bar*.

* The alarm has been given that the Harmonics (and by parity of reasoning the divisions on the Monochord) are out of tune, by growing successively too sharp. The only publication in which the subject has been traced, is the "Treatise on the Harmonic System by John Macdonald, Esq." (*London*, 1822. *British Museum*); where it is stated that on the 3rd string of a violoncello, the Harmonics in general are "about *one-tenth part higher* than they ought to be, *cæteris paribus*." (See page entitled Postscript, but prefixed to the Preface). And the appearance is considered as confined to the Harmonic divisions.

The phænomenon seems to be accounted for, by the resistance of the air; and the remedies are easy in the case of the Monochord and everything else which depends on the discretionary division or arrangement of sonorous bodies. But in the case of the Harmonic sounds, all that can be done is to note, that the errors are only sensible on strings of considerable thickness and length, and that however far the subdivision is continued, the error in sound will never amount to the double of what occurs on the first bisection at the Octave.

If any length of string is taken on a Monochord and then doubled, and the first and the doubled length are respectively made to vibrate through distances at their middle point proportioned to their lengths, the double string will in one vibration pass over twice the distance of the other, but the vibrations will be only half as many in the same time. So that on the whole, the two strings may be considered as passing over equal distances in a given time, and with the same velocities; for though the velocity varies from the greatest to nothing during the time of any one vibration of either string, it varies by the same law in both. On this ground therefore, taken by itself, it might be presumed that the retardations caused on each string by the resistance of the air would be of the same final amount, or such as to continue the proportion of two to one in the number of vibrations respectively made in a given time. But there is another element, which is, that the longer string has twice the surface opposed to the resistance of the

Chapter XVI is " On the Compensation for Depression," or for the sharpness caused by pressing a string down to the neck

air. The longer string will consequently be twice as much retarded, and will be too flat when compared with the other. And if the doubling was repeated till the length amounted to (for instance) 16 times the length first taken, the retardations on the several lengths would be as 1, 2, 4, 8, 16; and the sounds of the shorter portions beginning with the shortest, (whether settled by the Harmonic division or by frets at the same places) would be relatively too sharp for the sound of the longest string, by intervals of sound in the proportions of 15, 14, 12, 8; or taking them in the contrary order, the first, second, third, fourth Octaves, &c. would be too sharp by intervals of sound in the proportions of 1, 1¼, 1⅛, 1¼, &c., where by no continuation can the exponent be made to amount to 2. On different strings, the absolute errors at any particular place, as for instance at the Octave, may be concluded to vary as the diameter and length of string conjointly.

The question is next of the absolute magnitudes of the errors on some given string. Tune the thinnest string of a guitar to be a Double Octave to the thickest, (which last is about 07 of an English inch in diameter and 25 inches long, being of the same diameter and nearly the same length as the 3rd string of a violoncello specified in the treatise referred to), and then make the thinnest string a little too flat. Put the end of a blunt pen-knife between the thinnest string and the neck of the instrument so that the edge may act as a fret, and mark the point where the string so stopped ceases to be perceptibly too flat for the Double Octave to the other. Mark in the same manner the point where it ceases to be perceptibly too sharp; which with attention may be brought within an eighth of an inch of the other. Take the mean between the two; which may be concluded to be the point where the string makes exactly the Double Octave. Find by the same kind of process the mean point where the string makes a unison with the Harmonic Double Octave as produced on the thickest string at one-fourth of its length; and note the distance between the two means. Repeat the experiment several times, slightly altering the pitch of the thinnest string between each, to make the judgments independent; and take the average of the results. *The point which makes the unison with the Harmonic will be found nearest the bridge by about one-tenth of an inch;* which is the space corresponding with one-third of a comma. And since the error at the Octave will be two-thirds of what it is at the Double Octave, the error at the Octave on the thickest string may be set down as $\frac{2}{3}$ of a comma.

It follows that all which is ordinarily required in tuning two strings to be Octaves, Double Octaves, &c. by means of bringing one of them into unison with a Harmonic of the other, is to lean towards that side of what the ear accepts as unison, which is indicated by the knowledge that the Harmonic is in a trifling degree too sharp.

In a system of division by frets, the corrections to be applied on this principle are easily estimated. The errors in sound, in the example last given, being as 15, 14, 12, 8, 0, the linear alterations required to correct them will be as $\frac{15}{16}$, $\frac{14}{8}$, $\frac{12}{4}$, $\frac{8}{2}$, $\frac{0}{1}$ (inasmuch as the effect of any given linear alteration will be inversely as the distance from the bridge at which it is applied); or multiplying by 16, they will be as 15×1, 14×2, 12×4, 8×8, 0×16. Whence generally, if A represents the whole or longest string, and x the length of a portion of it taken from the bridge, the linear correction required at the length x will be as $\overline{A - x} \times x$. And if the distance between the Key-note and corrected Octave be canonically divided, the corrections within it will follow a similar law in respect of the two ends.

Errors from this cause, assuming them to be sensible, will be reduced and virtually corrected by lengthening the string at the bridge in the manner suggested in the observations on Chap. XIX which follow; on which it would be tedious to go into details. It would appear therefore, that on the guitar, the process suggested includes the corrections of three kinds of error at once. And on a Monochord, all that seems required, is to have the means of altering the length of the string at the bridge to the extent of about an eighth of an inch each way, and then bring the sounds of the string above and below the Octave fret into exact unison by making alterations at the bridge, leaning towards that side of the debateable ground within which the ear cannot decide, which is gone to by lengthening the string. In this manner a correction will be made, both for any slight degree of *falseness* in the string, and for the trivial degree in which the shorter lengths might be too sharp.

On the gigantic strings of the Contrabasso or Double Bass Viol, and even on

made by dividing into three, &c. The sound produced is always the same as would be the sound of one of the aliquot parts measured from the bridge, if stopped in the ordinary way. A consequence of this is, that no ratios can appear among the Harmonics, but such as have for their first term, 1, 2, 4, 8, or some other of the numbers formed by continued multiplication by 2. The only canonical notes consequently that can appear among the Harmonics, (in addition to an unlimited succession of Octaves), are acute Major Seconds, Major Thirds, Fifths, and acute Major Sevenths. But there will be found the Superfluous Fifth and the Tritone; with a number of other sounds describable by the terms Superfluous and Redundant*. A knowledge of these points at once reduces the seeming wilderness of the Harmonics to clearness.

The notes of the Bugle, Trumpet, French Horn, Trumpet-Marine, and Eolian Harp, are Harmonic sounds; the untuneable noises which everybody must remember who has heard an incipient performer on any of the three first of these instruments, being those which are formed by the unserviceable or unsymmetrical ratios. In a subsequent part (§ 251 and following) are calculations interesting to Trumpet players, on the capabilities of their instrument; to which increased importance would be given, if improvements should at any time be made in the construction of musical instruments on Harmonic principles, as for instance by producing the Harmonic sounds in very remote octaves from a metallic bar†.

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* An interval increased by a Subtone is called *Superfluous;* and the contrary, *Diminished.* An interval increased by a Comma is called *Redundant;* and the contrary, *Contracted.*

† The alarm has been given that the Harmonics are out of tune. An assertion of this kind will not be passed over with contempt, by those who recollect that the variation of the compass was for some time opposed as an anomaly it was absurd to think nature would admit of. The only source to which the assertion has been distinctly traced, is the "Treatise on the Harmonic System by Lieut. Colonel John Macdonald (*London*, 1822, Brit. Mus.);" where it is stated that on the 3rd string of a violoncello, the Harmonics at the third and fourth parts of the string are about *one-tenth part higher* than they ought to be (See page entitled Postscript, but prefixed to the Preface). What is intended by *one-tenth part higher*, is not clear; but it is manifestly spoken of as something considerable.

On experiment, there is reason to believe there is foundation for the naked assertion, but the dimensions of the anomaly have been exaggerated. The fact seems readily accounted for, by the resistance of the air; and if so, the effect must equally extend to all attempts at determining musical sounds by arrangement of the magnitudes of sonorous bodies, the Monochord itself included. The remedies however, if the evil is proved of sensible dimensions, are perfectly within reach.

If a string is stopped in the middle, and the whole string and the half are respectively made to vibrate through distances proportioned to their lengths, the half string in one vibration will pass over half the distance of the other, but the vibrations will be double the number in the same time. On this ground therefore, taken by itself, it might be presumed that the retardations caused on each by the resistance of the air would be of the same final amount, or would

Chapter XVI is " On the Compensation for Depression," or for the sharpness caused by pressing a string down to the neck

be such as to continue the proportion of two to one in the vibrations made by each respectively in a given time. But there is another element, which is, that the longer string has twice the surface opposed to the resistance of the air. The shorter string therefore ought to gain upon it, and consequently be too sharp; and still more ought any smaller aliquot part, as a third or a fourth. The Harmonics therefore should grow successively too sharp; and the absolute errors should be greatest on the thickest strings, in the proportion of their diameters.

The question then is of the absolute magnitudes. Tune the thinnest string of a guitar to be a Double Octave to the thickest, (which last is of the same thickness, and very nearly the same length, as the 3rd of the violoncello); and then make the thinnest string a little too flat. Put the end of a blunt penknife between the thinnest string and the neck of the instrument so that the edge may act like a fret, and mark the point at which the string ceases to be perceptibly too flat for the double Octave. Mark in the same manner the point where it ceases to be perceptibly too sharp; which, with attention, may be brought within a tenth of an inch of the other. Take the mean between the two; which may be assumed to be the point where the string makes exactly the Double Octave. Find by the same kind of process the mean point where the string makes a unison with the Harmonic produced on the thickest string at a fourth of its length; and note the distance between the two means. Repeat the experiment several times, slightly altering the pitch of the thinnest string between each, for the sake of making the several judgments more independent of each other; and take the average of the results. *The point which makes the unison with the Harmonic will be found nearest to the bridge by about one-tenth of an inch; indicating that the Harmonic is too sharp by about a third of a Comma. And the same difference of resistance will cause the Double Octave as produced by stopping the string at a fourth of the distance from the bridge, to be too sharp by the same amount.* On the thinner strings the differences are imperceptible.

It appears, therefore, that in what may be considered as approaching to an extreme case, the error barely amounts to the smallest difference which musicians assign as perceptible to the ear. All then that will be practically required in tuning by means of the Harmonic of a string, is to lean towards the flat or the sharp limit of what the ear receives as unison, as one or the other is called for by the suspicion of the Harmonic being too sharp. For instance, in tuning the thickest string of the guitar (as is one of the best ways in practice) by bringing the Harmonic at a fourth of its length into unison with the first or thinnest string,—stretch the thickest string till its Harmonic approaches the sharp limit of what the ear admits as unison; for if the Harmonic was too flat, the sound of the open string would be still more so. And on the contrary, if the thinnest string is to be tuned to the Harmonic of the thick one, tune the thin one to the flat limit for the same reason. On the same principle, if there is a provision for correcting false strings by altering the length of the string at the bridge, a leaning towards giving the string the greatest length which will leave the stopped Octave in sensible unison with the Harmonic one, will give security against the tendency of the stopped notes in any stage to grow irregularly sharper from the cause threatened. For the influence of any small addition made to the string at the bridge for the purpose of preventing the stopped Octave from being too sharp, will be relatively greater as the string is shortened, and the tendency to grow irregularly sharper will vary in the same way; the consequence of which will be that the two tendencies will go on equably counteracting each other. And in the same manner, in an instrument where the sounds should be produced by metallic bars or plates regulated by *weight*, a rectification would be effected throughout, by the simple remedy of adding to each a uniform number of grains, which must be gathered from experiments of a nature analogous to those described in the preceding paragraph. In the wire of a Monochord for the use of tuners, this correction, on account of the thinness of the wire, would probably not amount to more than the fiftieth of an inch, and may be neglected altogether.

On the gigantic strings of the Contrabasso or Double Bass Viol, and even on

of an instrument; which may be considered as effected on the Guitar, by setting the bridge awry so as to lengthen the thickest string by the fourth of an inch*. Chapter XIX is "On the method of correcting False or irregular Strings;" which it is proposed to attain by reducing the diameter of the string in the parts requiring it. But there is a practical objection to this; which is, that a string, particularly the thinnest, will want correcting after every one or two hours' use, through the wearing of the part struck by the hand. It is apprehended that the substance of both these chapters might be attained with advantage, by means of a bridge where in addition to setting the bridge awry as mentioned, any of the strings could further be shortened at discretion to the extent of about a quarter of an inch, and lengthened by the double; which might be effected by making each string pass over a distinct wedge of ivory, moveable in a groove in the solid bridge. In this manner, the length

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the thickest string of the Violoncello, it is possible that some sensible sharpening of the Harmonics may take place; and if so, it might amount to a reason why the introduction of the Harmonics in these instances should be avoided, and increased precautions taken in case of tuning from them. But it is satisfactory to find, that no perturbations can arise from the source pointed out, which can in the slightest degree interfere with the practicability of obtaining Correct Harmony by means of the theoretical arrangement of lengths or magnitudes.

* The increase of tension on pressing a string to the board, varies inversely as the length of the part which sounds. Whence may be inferred, that an addition to the length of the string at the bridge, which will correct the error when the string is pressed down at one point, as for instance at the Octave fret, will correct it at every other. The length so added, is called the *compensation*.

If the angle between the string and the plane to which it is pressed is altered (which is best measured by their distance at the Octave fret, named the *elevation*), the magnitude of the compensation required will vary as the *square of the elevation*. And if the length of the whole string is at the same altered, the compensation will vary as $\frac{\text{square of elevation}}{\text{length of string}}$.

To find the absolute magnitude of the compensation for a particular string at a particular elevation, lengthen the string at the bridge till the Octave made by pressure to the fret, ceases to be too sharp for the Harmonic Octave. Mark the points where the string passes over the bridge and head, and repeat the experiment at the same pitch, with the ends of the string reversed. Take the mean of the two experiments; which will be free from the effects of the string being *false*, or of unequal thickness in different parts.

From a number of such trials, it appeared that the compensation for the thickest string of the guitar, of 25 inches long and with an elevation of fifteen-hundredths of an inch, was one-fourth of an inch; and for the thinnest string, three-hundredths of an inch, with intermediate quantities for the other strings. The cause of this difference in the strings, is manifestly the greater extensibility of the thinner; or the same quality that makes a turn of the screw produce less alteration of pitch on the thinner string than on the thicker.

But the elevation of the thinnest string is usually reduced to two-thirds of that of the thickest (or to a tenth of an inch) and the others proportionally. The compensation for the thinnest string will consequently be reduced to thirteen-thousandths of an inch, which may be neglected altogether. What is demanded therefore for practical purposes, is that the bridge should be set awry so as to lengthen the thickest string by a fourth of an inch. In illustration of the utility of this correction, an eminent teacher of the guitar declared that he had been plagued all his life with sixth strings too sharp at the Octave.

of each string might be kept adjusted so as to make its stopped Octave agree with its Harmonic one; which would be a correction for practical purposes*.

Chapter XVII is "On the method of Tuning." Which must be done by bringing one string into unison with the proper fret on another; for some of the intervals are always to be Redundant &c.

Chapter XXVI "On Temperament" has in some degree been anticipated; but the subject is of importance, and far from being generally understood.

'If the Enharmonic Guitar arranged for any key, and with its short frets joined by lines of Indian ink as described in § 167, is placed by the side of a Guitar on the common construction,—it will be manifest that the notes of the latter are formed by making some divisions too long and others too short, and so bringing the frets on six strings into a straight line, at a kind of medium distance.'

'If a statuary, instead of making fingers of the various lengths which nature has made them, should determine to alter their lengths for some convenience of his own,—he would perform the same kind of operation that is here performed on the Guitar. And this would be a *Temperament;* and Temperament in music is this.'

'As in the statue the worst temperament of all would be that which should make the fingers of one common length, so in music the worst would be that which is produced by dividing the octave into twelve equal intervals. And this is what is put in execution on the common Guitar; being effected by an instrument the guitar-makers call a *compass of division*, by means of which they can divide a string of any length into intervals in equal successive proportion, of such a nature that twelve shall be equal to half the length of the string. Other kinds of temperament there are, which aim at altering these intervals from their equality, in such a manner as shall bring a certain number of keys into more tolerable tune, at the expense of throwing an increased quantity of error on the rest. Of this nature are the different artifices or rules applied by tuners, in tuning keyed instruments upon the ordinary construction†.'

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* For increased accuracy, compare the sound of the string as stopped at the third of its length from the bridge (or on its Octave Fifth), and also the Harmonic Octave to the string as stopped at the third of its length from the head (or on its Fifth), with the Harmonic Octave Fifth made by touching at the third; and if either does not agree, accommodate a little in the length of the string at the bridge, with a view to bring these, as well as the Octaves, to an agreement. If this cannot be done, the string should be rejected; or, if it has been worn by playing, the third next the bridge should be cut off.

If this is objected to as complicated,—everything is complicated, except being out of tune. The writer of this saw a performer on the Irish pipes in Dublin, who tuned his several pipes by inserting the pith of a rush, whose length he regulated to his purpose. Surely a guitarist might do as much for the sake of Correct Harmony.

There might, however, still be objections in some directions. Guitarists are terribly afraid of anything that may *jar*, or that can reduce the microscopic nicety of the touch. But where the object is to arrive at the luxury of hearing correct sounds, some sacrifices may be made and still the good predominate.

† 'Another way in which the word Temperament is sometimes used, is by applying it to the division of the octave into an increased number of equal

'When musical writers say "No ear could endure untempered music," they mean that no ear could endure to have an instrument correctly tuned for one key, and to make the notes so tuned serve for all possible keys. They mean to say, that if it is determined to make the same sounds serve for a multitude of keys, it is better to spoil all the keys a little, than to have one good and the rest intolerably bad. But they do not mean to say, that it would not be best to have all the keys good if they knew how;—or that any man has ever established that he could make more perfect harmony in any particular key, than is made by the canonical divisions.'

'Again, when they speak of "the imperfection of the musical scale," they should say "of their own scale;" for there is no imperfection in the scale of nature. If twelve nominal Fifths are counted on the pianoforte,—by going, for instance, from A to E, from E to B, from B to F♯, and so on to twelve times,—the note arrived at will be A again, in the seventh octave; because there are twelve finger-keys in the octave, and seven in what is called the Fifth, and consequently twelve such Fifths must come to the same place as seven Octaves. But twelve successive Fifths, each made by stopping the string at two-thirds of its previous length, are not equal to seven Octaves, for they are more by the interval called the "Comma of Pythagoras*;" as may be proved by the addition of ratios, or in a rough way by employing the numbers in the Index Scale. For—to use the latter method—12 times 31 is 372, and 7 times 53 is only 371. And this is spoken of under the title of "the imperfection of the musical scale." But it is only necessary to place the divisions of the Canon by the side of the Index Scale, to see that if A is the Key-note, the intervals from A to E, and from E to B′, are Fifths, but the interval from B′ to F♯ is only 30 degrees of the Index Scale instead of 31, being on examination less by a Comma than a Fifth; which at once accounts for the difference. To insist on making it a Fifth, would be in fact to go out of the key of A, and into some other. The imperfection discoverable, therefore, is simply the imperfection of determining to make equal what nature has made unequal; as in the case of the statuary who should determine to make the fingers of the same length when they are not.'

'Temperament then, is a barbarous invention for saving trouble by playing out of tune;—for playing in many keys, by playing in no key at all;—for trying how much discordance the ear can be induced

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intervals, with a view to effect an approximation to correct harmony by their employment. The octave (as may be seen by inspection of the Harmonical Circle) contains five *tones* and two *limmas;* and the attempt to express the *tone* by 3 of the equal parts into which the octave was to be divided, and the *limma* by 2, led to the division into 19, which was the origin of Harpsichords with a finger-key for A ♯ and another for B ♭, &c. For five times 3, and twice 2, make 19. In the same manner the attempts to represent the *tone* by 5, 7, and 8 of the equal parts, and the *limma* by 3, 4, and 5, led to divisions into 31, 43, and 50. And last of all, the idea was conceived of representing the *great tone* by 9; which led to the division into 53. These are improperly called Temperaments; for their true title would be Approximative Subdivisions of the octave. And as this sense of the word Temperament is different from that in which it is used in the text, it is better to keep them separate.'

* Which doubtless owes its having a local habitation and a name, to being this difference. Its ratio is that of 524288 to 531441; equal to a Comma and about one-eleventh.

to bear, instead of how much harmony it can be accustomed to demand. If men have not musical instruments that will play in tune in a variety of keys, they should be content to play in one, or else improve their instruments. But they ought not to play out of tune and call it music.'

'If it is urged that the differences are small,—the answer is, that it is upon small differences that all excellence depends,—and that the differences are quite sufficient to make the distinction between what strikes the hearers as perfectly harmonious, and what does not. There are nations that think statues with fingers of equal length are admirable performances, and contemn the difference as small. The tenth of an inch may in some senses be called small; but if the question is of the smoothness of a mirror, or the edge of a cutting instrument, it is a mountain.—But it is not true, that the differences *are* small. As a rough statement, if what is called a whole note on the pianoforte is divided into nine parts,—then three, four, five, and six of these parts are represented on the instrument by one and the same sound; the difference of the extremes being nearly as great as the difference between a note and its sharp or flat. It is probable that few of those who say the differences are small, ever suspected they were anything like this.'

'Should it be replied, that if people are pleased as they are, it is no charity to make them discontented,—the same argument would apply to the fingers of the statue, and to all kinds of improvement. A child is delighted with a hand-organ, and struck with a sense of sublimity from the paintings of an exhibition of wild beasts; and it may be doubted whether any of its impressions in after life, are stronger or so strong as these early ones. But it does not follow, that men ought always to be content with such music or such painting; or that it should be a point of economy to husband their progress in perceiving its defects*. Nature seems to be in a plot, to force man to be progressive; to oblige him to be continually forgetting what he has left behind, and pressing forward to that which is before. It is the salt of the earth; and there is no more use in quarrelling with the fact, than in rebuking grown gentlemen for liking claret, and forswearing sugar-candy.'

'A sophism advanced in favour of temperament, is, that the different keys have peculiar qualities in consequence of it;—that one key is lively, another grave, &c., in consequence of the differences arising out of temperament, or in other words from the keys, or some of them, being more or less out of tune. The mistake has probably arisen from confounding the characters of the Major and Minor series, with some supposed quality of the key in which they are found written. As it is easier to play in a moderate number of sharps or flats than in a great one, the keys which on tempered instruments are made to have

* In the Life of some man of note in English history, lately published or brought into notice by extracts in the newspapers, the subject of the biography is found stating with perfect gravity, that he made a point of cultivating a bad ear, because it increased his enjoyment by enabling him to relish bad music as well as good. It is to be hoped he cultivated the same economical relish for bad eggs.

the nearest approach to being in tune, are naturally those which present a moderate number of either. Hence, as the Minor series has always three more flats, or three fewer sharps, than the Major,—the tendency will be for airs in the Major series to be played in a number of sharps, and in the Minor, of flats. And from this the hearers are led to say, how plaintive are the keys with flats, and how lively the others. For it is observable that their opinion always flows in this direction; and that nobody is found attributing a lively character to a multitude of flats, or a plaintive one to sharps. But in all this there is not an atom of proof, that the particular merits of any key come by being out of tune. It is easy to imagine that either the liveliness of the Major series, or the plaintiveness of the Minor, will be increased by being perfectly in tune; and if any keys on the organ or pianoforte possess peculiar power in either of these expressions, the probability is, that being in tune is the cause. But that improvement of any kind is to be effected by being out of tune, is certainly not to be believed without proof.'—*p.* 18.

'A second sophism advanced in favour of temperament,—or, more strictly, in favour of the non-necessity of correct harmony,—is that the ear *understands what is meant, and makes allowances.* Which appears to be about as reasonable, as to say of a dish too much or too little salted, that the palate knows what is meant and will make allowances. Whether the senses are gratified or the contrary, is matter of sensation and not of argument; and a man may as soon "hold a fire in his hand, by thinking on the frosty Caucasus," as mend untuneable sounds by thinking on what they ought to be.'

'It is matter of experiment, that an instrument tuned enharmonically, is improved in tone or general power. The reason of which is, that the pulsations of the notes, being in their due proportions according to the simple ratios, do not shock and counteract each other as they do when untuned by the operation of temperament.'—*p.* 19.

'The real question with the supporters of temperament, is seldom clearly stated. Nobody denies that the different keys on tempered instruments have different qualities, and that one excells in one quality and another in another. But what is contended for, is, that these qualities arise from the degree in which the key *approaches to* the correct proportions in respect of what may be termed the influential notes, and not in which it *is removed from* them; and that the correct proportions would in every case be better than them all. To make an illustration from optics—The true form of a lens is mathematically proveable to be the parabolic. Spherical and elliptical lenses answer tolerably well, and are easier to make. If now it should be found in practice, that a spherical lens was better than an elliptical for one purpose, as for instance for a microscope, and an elliptical better than a spherical for another, as for instance for a telescope,—this would resemble the case made out for the different keys; but it would be no proof that the parabolic form would not be better than either. On the contrary, the natural inference would be, that the phænomenon would be found resolvable into the fact, that the spherical and elliptical forms did each, in those places respectively, approach nearest to

the parabolic form which was the true. If a passage of any kind be executed in the correct proportions, do the temperers maintain, and can they prove (either by the concurring testimony of persons of cultivated ear, or otherwise), that it is possible to mend this passage by any alteration in the intonation? Have they tried the experiment, and can they tell us, what kind of deviation from the mathematical proportions shall make a given passage more lively, plaintive, &c.? When pushed on these points, they answer by representing the mine of riches they possess in the various qualities of the keys; but they do not disprove the inference, that in each of these particular cases the correct proportions would be richer still.'

'The only writer who occurs as presenting an unequivocal exception to the above, is Earl Stanhope. And by him it has been distinctly asserted, that a "Bi-equal Third" (being half the difference between a Major Third and an Octave, and consequently nearly coincident with a redundant Major Third), is better than a correct Third, in music of a solemn character. But this rests on assertion only; and has not been supported either by the concurring testimony of persons of cultivated ear, or in any other manner. A temperer is, by himself, a suspicious authority; for as it is certain that people who live where the water is brackish, think pure water at first vapid and deficient in something they have been accustomed to, so an individual may accustom his ear to untuneable notes, till correct harmony strikes him as insipid and wanting in expression. An effect which he is accustomed to, is removed; and instead of it is substituted an expression, (that of purity), which he has not learned to value. If it is argued, that salt water is the best for him that likes it,—the answer is, that his predilection is clearly traceable to want of familiarity with the other, and that all mankind without exception, who are placed in fair circumstances for accustoming themselves to one or the other as they may like best, agree in preferring the fresh.'

'The effect of correct intonation is the most sensible of all, in a simple melody. It may appear strange that the ear should judge more accurately of the relation of sounds when they succeed each other, than when they are sounded together; but so it seems to be. The reason probably is, that in one case the attention is collected upon a single note, to which all the error is necessarily referred; whereas in the other, it is divided among a number. If any person with an ordinarily good ear, will try the experiment on a perfect instrument with any striking melody, it will be found how much of the effect depends on the exact proportion of the intervals, and particularly on making the *great* and *small* Tone in their proper places. Take for instance the well-known fragment of the cathedral service, which may be represented by C C C C C B A B C, (C being the Key-note), and try how completely the sublime and melancholy energy of the passage depends on the just measure of the Limma (15 : 16) and the consequent existence of the *great* Tone between B and A, and how it will be destroyed by moving the fret of B a comma nearer to A. Or take the Venetian air *La biondina in gondoletta*, (which contains a number of successions of the Major Sixth, Fifth, and Fourth); and try the

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of the wrong. Considering it merely as matter of trade and commerce,—when it is recollected how many individuals apply themselves to instrumental music of this kind as their profession, and depend on their success in it for the degree of comfort they are afterwards to enjoy,—it is of as much importance in this art as in any other, that the process or manufacture should be carried on in the way that leads to the most perfect result, and by the shortest road.'—*p.* 19.

To play in correct harmony on instruments of the violin kind, it is necessary to tune two of the strings to a contracted Fifth, according to the intended key; which is easily accomplished by means of a low fret across the neck at a distance from the head equal to an *eighty-first* part of the length of the string, or what makes a Comma. If while tuning two strings to be Fifths to each other, the thinnest is pressed down to this fret, the interval on removing the pressure will be a contracted Fifth. The strings which should make a contracted Fifth with each other, are on the Violin the 1st and 2nd for the keys of B and G, 2nd and 3rd for C and E, 3rd and 4th for A and F. In the Violoncello and Tenor there is no E string; and the G string which is added for the thickest, should make a contracted Fifth with its neighbour, for the keys of B and D*. There is no contracted Fifth on the Violin for the key of D, nor on the Violoncello or Tenor for the key of G.

'The question therefore is, whether a practitioner on the Violin would not derive advantage from learning first to play in perfect tune in one key, paying attention to the formation of the grave Dissonances in their proper places; and afterwards extending the same study to other keys, and finally to the change from one key to another during playing. On this last point he would have an advantage in facility over a performer on the Guitar; because the absence of frets removes the necessity for playing in what have been termed different *stages* of the instrument. Any difficulty or tediousness in such a process, sinks into nothing if there is a prospect of advantage in the end. And it is in reality a much simpler affair than it appears, for it is reducible to obtaining a familiarity with all the sounds in the octave (which, including the double Dissonances, are only fifteen), and acquiring a facility in taking them correctly from any point in the string.'

'It is hazardous to speculate on the untried; but what may be surmised is, that such a course, though at first it might appear laborious and constrained, would end in making the performer as sensible of an error of a Comma, as ordinary hearers are of an error of what they call a Semitone,—and in producing a facility and precision in all

* The necessity for these contracted Fifths appears to be acknowledged in the maxim of violinists that it is good to avoid the open strings.

changes of key, as unaccountable to a stranger, as the power of fluent reading is to a person who is learning to spell. What should be impressed on such a student is, that playing enharmonically means playing in tune; and that those who are taught otherwise, are taught *not* to play in tune.'

'To professional singers the question may in like manner be suggested, whether it would not be better that they should be taught the true division of the scale, than one which is *not* the true;—whether, for example, they would not attain more rapidly and effectually to correctness of tune, by being taught the difference between a grave Dissonance and an acute one, and between a Great Tone and a Small one, as for instance between the interval of the Fourth and Fifth, and that of the Fifth and Major Sixth,—than by being left to find all this out (if they ever *do* find it), in opposition to what they are taught and not by means of it. The question is like that of instructing a scholar in sculpture, to make the fingers of the same length, or leaving it to the chance of his native judgment and observation how far he ever does the contrary.—And in addition to all this, the singers have an interest in being accompanied by correct harmony; for it is impossible that an ear refined by the practice of a life, should not be continually offended by the discordant sounds with which it is associated*.'

'It seems clear therefore that the two most important classes of musical artists, the singers and the violinists, have a direct interest in the cultivation of Correct Harmony. What the general diffusion of such cultivation might finally produce, is yet to be learnt. Mankind

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* 'What seems to be wanted both by singers and violinists, is the habit of viewing notes simply with reference to their place in the octave, or their relation to the existing Key-note; instead of attempting to refer them to a scale of fixed sounds. And for this purpose it would only be necessary to employ the syllables *do, re, mi, fa, sol, la, si*, according to what was probably their original intention,—by taking *do* for the Key-note in every key, and the rest for Second, Third, &c. in succession; which is what the French call *solfier par transposition*. The Minor sounds of *re, mi, la, si*, might be expressed by changing the final vowel into the Italian *u*.'

'The first step would be to obtain an exact acquaintance with the intervals ascending and descending in the Major series; impressing the ear with the difference between the Small and Great Tone, and with an accurate perception of the Limma or interval of five degrees which appears in two places. Next, to do the same in the Minor series. Thirdly, to take the Minor and Major series together, as in what are called Chromatic passages; attending to the exact magnitude of the Subtone, and its difference from the Limma, of which it is not much more than half. Fourthly, to acquire a consciousness of the difference between the double forms of the Dissonances, by practising passages in which they shall respectively be called for, by virtue of a succession to the Third or Fifth, or to the Fourth or Sixth (See § 76); and subsequently by executing them in conjunction with those Consonances, as expressed either by a voice of confirmed accuracy or a perfect instrument. On which part of the process it may be observed, that instead of being a complication and a difficulty, it is in reality a simplification; being nothing but making an accurate Concord with the note with which the Dissonance happens to be connected. And lastly, to acquire the habit of doing all this with equal facility and certainty, from any sound within the compass of the performer.'

has lived under a dynasty of teachers to play out of tune; and can only guess at the consequences of improvement, as savages may at civilized life.'—*p.* 20.

Calculations are given, on the possibility of playing in the Minor series in the upper notes of two Horns, the pitch of one of which shall be raised a Limma by taking off a crook. And if instead of raising the pitch of one Horn by a Limma, it is lowered by a Great Tone, the Horns can between them produce all the notes required for playing in the Synonymous [or as it is unmeaningly called, the Relative] Major and Minor, or for changing to the Major series of the key of the Fourth*. The principle of executing upon a number of Horns conjointly, has been carried to a great extent in what has been known by the name of the Russian Horn Band.

'On the Organ, if instead of multiplying useless stops, the pipes were tuned for different keys, with distinct finger-boards for each key,—the instrument would possess the power of playing correctly in various keys, and the double Dissonances might be produced by making the finger-keys of the Dissonances double.' As the grave Dissonances are of comparatively rare employment, it would be easy to retire the half-keys belonging to them, in such a manner as to leave the other set as ready to the hand as in ordinary instruments. The *Tritone* should be added in each key, because it makes the number of finger-keys (reckoning those of a Dissonance as only one) the same as in ordinary instruments, and moreover gives the power of making the commonest accidental sharp. The keys might be reduced to those of G, C, E; or any others bearing the same relation to each other. This would give the power of moving from the key of G Major to the Synonymous (or Relative) Minor and to the key of the Fourth; and in performances in a single key, it would afford as much choice of key as is perhaps absolutely necessary, for suiting the pitch to the compass of the voices that are to accompany†. The Major and Minor of the same key, would be possessed without difficulty or imperfection, in all the three. If the same pipe can be made to serve in all the places where the same sound occurs, the number of distinct sounds within the octave in the three keys together would be only twenty-six; the *measures* of which are given in a Table‡, the keys in which they respectively appear being marked opposite to each. A monochord formed of a drawn steel wire, might be used to determine the inter-

* 'Numbers of the Index Scale, on the different Horns in order named.'

I.	0	9	17	31	34	40	48	53
II.	5	14	22	36	39	45	53	
III.		0	8	22	25	31	39	44

† 'Since the first of the keys here mentioned is that which is rich in the power of changing to the Synonymous Minor and to the key of the Fourth, it is desirable that it should be one whose pitch is best adapted to extensive use. This was supposed to be effected by placing it on G. But any note that is preferred may be substituted; changing the two other keys so as to preserve the relation.

‡ 'Table of the *measures* in one octave, for an Enharmonic Organ in the keys

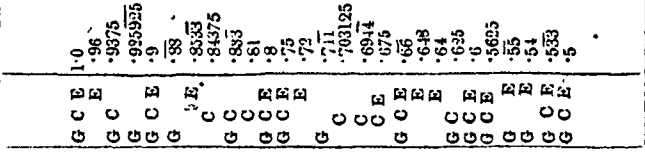
vals in one octave; and the distances on the monochord will be determined by multiplying the *measures* in the Table by the length of the string. Care should be taken that the moveable fret moves in such a manner as always exactly to touch the under surface of the string; so that the string may be stopped by the slightest pressure above the fret, without requiring any compensation for depression. Since the effect of ecclesiastical music depends more on the concord of solemn sounds than on intricate changes of key, there seems reason to believe that an experiment of this nature with a church organ would be very likely to be attended with success and reputation. If a taste for playing in tune should gain ground, the number of keys might be extended. The difficulty of tuning and keeping in tune an instrument of this kind, would be much less than may at first appear. For it is impossible that even the tuning of the sounds in question to those of a monochord, could present more difficulty in the accomplishment, or be liable to more derangement afterwards, than the tuning of the multitudinous pipes in an assemblage of stops to each other.'—*p.* 21.

In such an instrument, the Key-note in each finger-board, in all the octaves, should be of some distinguishing colour, as for instance red.

'The same principle might be extended to the Pianoforte; and an instrument capable of playing in the three keys mentioned in the last section, might be constructed for something more than twice the expense of an ordinary one. The difficulty of tuning and keeping in tune, could by no means be equal to that which is attendant on tuning three strings in unison for each note of a grand pianoforte.'

'With still greater advantage might the principle be extended to an instrument where the sounds should depend on the vibration of an elastic plate or bar, or be produced in some other way not liable to go out of tune. For though some alterations might be produced by changes of temperature, they would in the first place be very small, and in the next, there would always be the resource of arranging the temperature. It seems probable also, that the *weight* of the bars or plates, might be employed as a mode of ascertaining and regulating their pitch; which would present some great advantages. The Glass

of G, C, E; The open string of the Monochord must be tuned to G.'



'A horizontal line over any number of figures, indicates that such figures form a recurring decimal.'

Harmonica and the musical snuff-box appear to be the only instruments of this kind that have been yet constructed; but it is extremely likely that others will at some time be invented. An instrument on such a principle, which should possess the power and facility of execution of the pianoforte, would be a brilliant improvement.'—*p.* 21.

Though such an instrument might be deficient in sustained and varied tone, and others of the qualities attainable on the voice and violin, it would be an excellent guide to the practitioner on either of those instruments, and contribute powerfully to the attainment of perfect intonation either in solos or in concert.

Chapter XXVIII is on the proofs of identity of design with the Enharmonic of the ancients; which involves the propositions this Article set out with professing to maintain. Many evidences are found scattered in separate places, of accuracy of knowledge and expression on the part of the ancients, which none of the moderns can exceed. But to these may be added direct declarations of design, as conveyed in their own words; which will be given after an extract from the commencement of the work, bearing on the same subject.

'The following pages had their origin in a desire to abate the untuneableness of the common Guitar; which, though an instrument possessed of many agreeable qualities, has the defect of being out of tune to a greater extent than any other that is played by means of either strings or finger-keys. For the other instruments,—as the pianoforte, harp, and organ,—are at all events capable of playing, in some keys, with something like an approach to correct harmony. While on the guitar, the errors, instead of being collected into some particular keys, are disseminated as widely as possible among all, in consequence of the octave being divided into twelve equal intervals; which is in fact necessary as long as the frets for the six strings form continued straight lines, to cause the Octaves, and the representatives of the same sound in different stages of the instrument, to be in tune with each other. And besides this, the instrument has two other sources of inaccuracy,—namely the errors caused by the increase of tension produced on pressing a string down to the fret, and those arising from inequalities in the string itself, or what is called the string's being *false*; either of which, if not remedied, would be fatal to the attempt at correct harmony. So that it is quite true, according to the observation of *Père Mersenne*, that in its ordinary state '*le Luth est le Charlatan de la Musique, parce qu'il fait passer pour bon ce qui est mauvais sur les bons Instrumens**.'

'It will however be recollected, that the *Guitar* is the representative of the *Kithara* (κιθάρα) or *Cithara* of the ancients; and that the

* 'The Lute is the Quack-Doctor of Music, because it passes off for good, what is bad upon good instruments.'—*Nouvelles Observations Physiques et Mathématiques.* 1648.

ancients had a kind of musical division under the title of Enharmonic, which they applied to their principal instrument the cithara or lyre, and considered as more perfect than the other modes of division which were in use at the same time. What this Enharmonic division was to do, nobody has seemed able to tell; and since the ridicule thrown about the subject in the "Memoirs of Martinus Scriblerus," it is hardly safe to desire to know. The account given by the moderns appears to be, that "the artificial and difficult Enharmonic was lost soon after the time of Alexander the Great*;" yet there exist numerous works of the ancients upon the subject, from Aristoxenus and Euclid down to Ptolemy and Capella†. The first inference from these remains of antiquity is, that the musical string was divided into a very great number of parts; and it appears from a passage preserved by Photius, that a philosopher of the fifth century, in an endeavour to recover the Enharmonic genus, carried the divisions to as many as 220, but without success‡. One thing however is clear;—that the ancients attempted to improve the cithara by means of a complicated scale of division. And if the improvement which was the object of their search can be recovered upon the instrument where it appears likely to be easiest of access, it may be found capable of extension to others where the application is less obvious.'

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* 'Burney's History of Music. 2nd Edition, Vol. I. p. 425.'

† 'A collection of them in two volumes quarto, was published from the Elzevir press in 1652, and dedicated to Christina queen of Sweden, by the learned Meibomius of Helmstadt; whose reported ill success in endeavouring to sing an ancient Greek air before his patroness, is evidently the origin of one of the stories in Scriblerus.'

'The title is "*Antiquae Musicae auctores septem Graecé et Latinè, Marcus Meibomius restituit ac Notis explicavit. Amstelodami, apud Lud. Elzevirium.* 1652." The contents are

Aristoxeni Harmonicorum Elementorum, libri 3.
Euclidis Introductio Harmonica.
Nichomachi Geraseni, Pythagorici, Harmonices Manualis:
Alypii Introductio Musica.
Gaudentii, Philosophi, Introductio Harmonica.
Bacchii Senioris Introductio Artis Musicae.
Aristidis Quintiliani de Musicâ, libri 3.
Martiani Capellae de Musicâ, liber nonus.'

'The reason of the authors being called seven in the title, is probably that Capella is not accounted an ancient, who lived as late as A. D. 470.'

'The Euclid is the Euclid of geometry; and his "Introduction to Harmonics," and "Section of the Canon," bear the marks of the author of the "Elements."'

'Ptolemy's work on "Harmonics," with a Latin translation and notes, and additions from Porphyry and Briennius, was published at Oxford by Dr. Wallis in 1682.'

‡ "Ὅτι εὐφυέστατος ὁ Ἀσκληπιόδοτος περὶ μουσικὴν γεγονὼς, τὸ ἐναρμόνιον γένος ἀπολωλὸς, οὐχ οἷόστε ἐγένετο ἀνασώσασθαι, καί τοι τὰ ἄλλα δύο γένη κατατιμὼν καὶ ἀνακρουσάμενος, τό, τι χρωματικὸν ὀνομαζόμενον, καὶ τὸ διατονικὸν· τὸ δὲ ἐναρμόνιον οὐχ εὗρε, καίτοι μαγάδας, ὡς ἔλεγεν, ἀπαλλάξας καὶ μεταβεὶς, οὐχ ἑλάττους εἴκοσι καὶ διακοσίων. αἴτιον δὲ τῆς μὴ εὑρέσεως, τὸ ἐλάχιστον μέτρον τῶν ἐναρμονίων διαστημάτων, ἅπερ δίεσιν ὀνομάζουσι· τοῦτο δὴ ἀπολωλὸς ἐκ τῆς ἡμετέρας αἰσθήσεως, καὶ τὸ ἄλλο γένος τὸ ἐναρμόνιον προσαπώλεσεν.

'Asclepiodotus, who was naturally of a particular disposition for music, was not able to recover the lost Enharmonic genus, though he succeeded in dividing

'The object of what follows will be, first, to show how the Guitar may (with some trouble indeed, which "the gods have attached to everything good,") be made to produce correct harmony, or in the language of musicians be a perfect instrument;—and afterwards, to present the reasons for believing, that the lost *Enharmonic* aimed at neither more nor less than this, and in fact meant nothing but playing *in harmony*, or in other words *in tune*. How far the other modes of division are from being in tune, will be best collected subsequently from comparison.'—*p.* 1.

'If there was no evidence but the traces of correspondence with the theory of the ancients which have been remarked from time to time in the course of what has preceded, the inference would be very strong, in favour of the identity of design. But the ancients have not left the question in this condition; for, however far they may have been from being successful in the execution, their object is found stated in language which it is impossible to mistake. Thus it is distinctly said by Aristides Quintilianus, that "the Enharmonic is so called, from its being taken in the perfect intervals of whatever is the subject of the harmony*." And again, that "the Enharmonic is the more correct†." And in another place, he speaks of "the Enharmonic which is uniform and suffers no variation ‡." And they even go so far as to call the Enharmonic by the name of *Harmony;* which with them means simply being in tune. Thus Aristides Quintilianus says, "the name of *Harmony* is given to the genus which abounds with the smallest intervals; from their making harmony with one another §." And "The genera," saith Euclid, "are three; Diatonic, Chromatic, and *Harmony*||."

'How far the ancients were successful in the attainment of their object, is another and a different question; and the truth seems to be that they attained it very imperfectly, which is the probable cause of its having been ultimately abandoned. But there appears to be no reasonable doubt of what their object was; or that the perplexity which has existed upon the nature of their Enharmonic, has arisen from confounding *compound* intervals with simple ones,—from such a

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and executing the two other genera, the one called the Chromatic, and the Diatonic. But the Enharmonic he did not find out; though, by his own account, he shifted and transposed moveable frets to the number of not less than 220. And the reason of his not finding it, was that the smallest of the Enharmonic intervals, which is called the *diesis*, was lost from our perception, and the rest of the Enharmonic genus was lost along with it.'—*Photii Bibliotheca. Sect.* 242. *p.* 1051. *Edit. Berthelin. Rothomag.* 1653.

'* Τὸ δὲ ἐναρμόνιον, διὰ τὸ ἐν τῇ τοῦ δημοσμένου τελεία διαστάσει λαμβάνεσθαι.—*Aristides Quintilianus de Musicâ. Lib. II. p.* 111. Meibomius.

'† Ἀκριβέστερον δὲ τὸ ἐναρμόνιον.—*Id. Lib. I. p.* 19.

'‡ Τὸ μὲν ἐναρμόνιον, ἁπλοῦν τι ὂν καὶ ἀπαθὲς.—*Id. Lib. III. p.* 134.

'§ Ἁρμονία μὲν οὖν καλεῖται τὸ τοῖς μικροτάτοις πλειόνασαν διαστήμασιν, ἀπὸ τοῦ συνηρμόσθαι.—*Id. Lib. I. p.* 18.

'|| Γένη δέ ἐστι τρία, διάτονον, χρῶμα, ἁρμονία.—*Euclid. Introd. Harmon. p.* 3. Meibomius.

mistake, in short, as would be fallen into by any person who should imagine that the various distances marked on the finger-board of the Enharmonic Guitar, proceeded from a desire to make strange intervals with hard names in the same movement or key, instead of perceiving that they were only the places where the ordinary divisions of the Canon fell at different times, by virtue of beginning at different points in consequence of changes of key. Their object was to produce correct harmony, or what they supposed to be such, by the application of a uniform and unvarying rule in all cases. Which is in no degree incompatible with the fact, that their knowledge of what this rule ought to be in any one case, was exceedingly imperfect. All that is proved by it is, that they conceived the idea of the secondary discovery, before they had perfected the first.'

'One difficulty remains; which is, how the ancients applied either Diatonic, Chromatic, or Enharmonic, to such instruments as they appear to have possessed. It would be solved at once, if it might be assumed that the lyre had a finger-board behind the strings, which had escaped representation upon ancient monuments. But what seems decidedly opposed to this, is that Ptolemy, who lived a century after the commencement of the Christian æra, is found describing the attempt of some musicians of his time to perform tunes on a Monochord in the manner of the modern guitar, as an unsuccessful experiment *; a statement inconsistent with the supposition that the lyre had been always played on in the same manner. It is at the same time evident, from the nomenclature of their notes, that the ancients derived their notions of the various sounds, from a string stopped in different places as done upon a Monochord or a Guitar. The only conclusion therefore that seems consistent with facts, is that they formed their theory of musical notes upon a Monochord, and then transferred them to the lyre, as might be done in the present day to a harp or a pianoforte. It is true that the lyre of Mercury with *three* strings, must have made as limited an accompaniment as the flute with three holes used in playing the Pipe and Tabor. But the number of strings appears quickly to have been increased; and to have been ultimately carried by Epigonus to forty.'

'The non-employment of instruments with necks does not seem to have been caused by ignorance of the principle. For instruments of the guitar kind with necks, are found represented in the tombs at Thebes, on the Egyptian obelisk at Rome, and in various other remains of remote antiquity; and what was known in Egypt, must have been conveyed, along with other knowledges, to Greece and Rome. The inference therefore seems to be, that instruments with a string for each note were older still; and that they held their ground after the other kind was known to exist, in the same manner as the harp and pianoforte have done in modern times.'—*p.* 21.

A canon of criticism which either exists or ought to do, on such remains as those of the ancient music, is that whatever is intelligible, ought not to be neutralized by what is not. There

* *Claudii Ptolemaei Harmonicorum Lib. II. cap.* 12, 13.

has clearly been a great deal of pouring out of one bottle into another; and much writing of what the writers did not take the trouble to understand, or at all events consigned their understanding to memorials that have not come down to the present times. No argument, therefore, should be drawn from the impossibility of bringing all that the ancients have written, within the pale of comprehension. It is enough to attend to what is decipherable in the manuscript; without entangling it with what is not.

There remains only the attempt, as formerly intimated, to throw further light on the connexion between simplicity of proportions and harmony. On which it is much easier to show, that a great deal is still to be discovered, than to arrive at any very satisfactory conclusions.

'But it is possible to go somewhat further with the pursuit of the cause. Let three strings of the kind used for the sixth or thickest string, be put on the guitar and tuned in unison, and the rest removed. On striking either of the outer strings separately with a certain force, the middle one will vibrate; and on striking them both at once with the same force as before, the agitation of the middle string will be *increased*. And this will occur, whatever may be the relative positions of the three strings; and it makes no difference in the result, whether the vibrations of the two outer strings take place towards the same parts at the same instant of time,—or in the manner directly the contrary, as will be the consequence of plucking the two strings inwards or towards the middle string,—or in any other of the possible ways. Which is evidence, that there is a concurrence in the effects of the vibrations of the two outer strings upon the middle one, these vibrations in reality exciting one augmented oscillation of the air, and not two oscillations; and that it equally takes place in whatever manner the pulsations from the vibrations may appear to cross and strike against each other.'—*p.* 3.

The inference here pointed at, is a remarkable one; being no other than that two strings which vibrate with the same velocity, equally assist each other in forming one augmented oscillation of the air, whether their contemporaneous movements happen to be in the same direction, or *in the directly contrary* or any other. That an accumulated effect should be produced when the movements are in the same direction, is easy to conceive; but the other has the air of a paradox. Nature, however, is not without similar paradoxes, which vanish on examination; the most notable of which, to compare small things to great, will occur to the mathematician as presented by the conjoint action of the moon and sun in producing a spring tide at full moon, when cursory examiners are unanimous in declaring there ought to be a neap.

'If the middle string is an Octave above the two others, the same results will ensue, only weaker in degree. And if the middle string is a Fifth or a Fourth instead of an Octave, its vibrations will be too weak to be distinguished by the eye; but if the outer strings are struck strongly, and suddenly stopped by the application of the fingers, the middle string will be heard distinctly afterwards, which is proof that it vibrates. The inference from which appears to be, that in these cases also, the effects of the oscillations of air on the middle string have a tendency to accumulate.'

'The way in which these phænomena take place, seems to be explicable on the principle of the air's perfect elasticity; the examination of which is transferred to the Appendix.'—*p.* 3.

Such a phænomenon can only be accounted for on the supposition that it is a consequence of the paradoxical principle arising out of the air's elasticity; for it appears certain that in a swing acted on by impulses whose periods bore the proportion of 3 to 2 to its own periods of oscillation, motion would never accumulate, but be destroyed as fast as any tendency to it should be created.

Since then there is a principle which causes a string to communicate motion to its Fifth, the only way in which their conjoint oscillations can well be supposed to take place, is, as afterwards stated, that they are analogous to the oscillations of a smaller pendulum attached to a greater. And if so, it is not difficult to imagine, that the effect of the paradoxical principle arising out of the air's elasticity, may extend to causing conjoint oscillations to take place of the same kind, in whatever manner the two strings may be struck. It would be merely an extension of the similar effect proved by experiment to be produced in the case of unisons. But if the conjoint oscillations are of this nature, there must be a series of concurrences between the oscillations of the two strings, the frequency of which will be determined by the qualities of the numbers which express the proportion of the oscillations made by each respectively in a given time.

'The frequency of the concurrences is equal to the frequency with which the successive coincidences would take place among the vibrations themselves, if the two strings should happen to vibrate in such a manner that some two of their vibrations coincided in point of time. And as this latter supposition (though confessedly an arbitrary one) affords the most tangible object of the two, it may be usefully employed as a way of measuring what actually takes place. By resorting to this standard, it is plain that the comparative frequency of the concurrences, in the different cases in succession, is the greatest that numbers will admit of; and the greater the comparative frequency in the different combinations respectively, the more perfect is found to be the combination. For the most perfect of all combinations is the Unison; where, in the supposed case resorted to as a measure, every vibration of one string

would coincide with every vibration of the other,—which is the greatest degree of frequency possible. The next in perfection is the Octave; where every vibration of one string would coincide with every alternate vibration of the other,—which is the next highest degree of frequency that heart can imagine, or the nature of things admit. The next is the Fifth; where every second vibration of one string would coincide with every third of the other. And so on. It is reasonable therefore to conclude, that the frequency of the concurrences described, (of which frequency the imaginable, or possible, coincidences of the vibrations are employed as a measure), is the way by which simplicity of proportion produces harmony. But whether this is considered as established or not, there is nothing to counteract the evidence, that the simplicity of the proportions is in some way or other the cause.'—*p.* 3.

That is to say, there is possibly no such thing as coincidence of vibrations (unless by pure accident, and then without any peculiar consequences); but there is a series of concurrences in the *effects* of the vibrations in producing oscillations of a certain kind in the air, and this equally takes place whether the vibrations of the two strings happen to be ever actually coincident or start in the same direction at the same instant, or not. And this coincidence in the *effects*, is of exactly the same frequency as the coincidence that would take place in the *vibrations* supposing them to begin by starting together as has been the common supposition; and therefore this last may continue to be taken and used as a convenient measure of the other.

The same subject is pursued in the Appendix.

'The motion of a vibrating string is plainly analogous to that of a pendulum or swing; the force which operates on the string to bring it back to the situation in which it will be finally quiescent, being governed by the same law as the force which operates on the pendulum,—viz. that, for small distances, it varies as the distance from the point of rest. Each vibration of the string therefore, like one of the pendulum, is in reality made with a velocity that is accelerated in approaching to the point where quiescence finally takes place, and retarded in removing from it. And the number of vibrations in a given time (the spaces moved through in all cases being supposed small) are the same whether the space moved through by them is greater or less,—or in other words, whether the string is struck forcibly or gently *.'

'When the string is moving outwards or *from* the point of final rest, it manifestly drives a number of particles of air before it in the

* The analogy between a string and a pendulum only holds good while the spaces moved through are altogether very small. If the spaces are made great, the pendulum is retarded and the string quickened; the perturbations in the forces being from different causes, and of contrary kinds.

direction of its motion; and these again drive other particles before them, an increase of density at the same time taking place in consequence of the elastic particles being crowded upon each other. But since the particles of an elastic fluid act equally upon each other in all directions, a movement of the air takes place not only in the direction in which the string happens to be moving, but in every lateral direction also, or what may be termed excentrically;—which is the reason why the sound of a string is heard whether its vibrations take place in the direction of the ear, or in any other. And when the string is moving back again or *towards* the point of final rest, a contrary movement of the air must take place, in consequence of the elastic pressure by which the particles are driven into what would otherwise be a vacuum. The oscillatory motion thus communicated to the particles of air, is proved by experiment to extend itself at the rate of 1142 feet in a second; such being the velocity with which sound is found to travel. And since the particles both receive themselves, and communicate to others, a velocity accelerated with the acceleration of the motion of the string, and the contrary,—it follows that every particle of air within the influence of the vibrating string, performs a succession of oscillations *from* and *towards* the string,—in each of which the velocity of the motion is accelerated and retarded as in the motion of a pendulum; the duration or period of each oscillation being equal to that of a vibration of the string.'

'But though the oscillations of particles at different distances from the string are made in equal periods, they are neither contemporaneous, nor of equal linear extent. That they are not contemporaneous, is known from the time sound takes to travel. And that they decrease in linear extent as the distance from the vibrating string increases, is proved both from the necessity there is for the effects of the elastic particles on one another decreasing as the number on which they act is extended,—and from the fact that sound is diminished by distance. The difference between a strong sound and a weak one, is that in one case the particles of air oscillate through a great linear extent and consequently with a great actual velocity, and in the other through a small one; though if the sounds are of the same musical pitch (as in the instance of a strong tone and a weak one produced from the same string of a violin by different pressures of the bow) the *periods* of oscillation are the same.'

'Hence if the particles of air could be made visible, and the oscillations instead of being made at the rate of several hundreds in a second were so slow that they could be judged of by the eye,—the particles within a few feet of each other would appear to oscillate together, like those of a tide that moves backwards and forwards in its channel. But if these oscillations were compared with such as took place at a distance considerably greater, it would be seen that the latter were behind the others, in the same manner as upon comparison at considerable distances it is perceived that the tide in the higher part of a river does not run downwards till some time after it has begun to run in that direction in the lower; and also that the linear extent through which the particles oscillated was diminished. Close to the string, the

linear extent of the oscillations would be equal to that of the vibrations of the string; and smaller as the distance was increased. And if the particles of air were possessed of colour, so as to mark the variations of density by the depth of the shade,—the colour at any given point would be seen to come and go alternately, in periods equal to those of the oscillatory motion; the intensity or positive magnitude of these variations of colour being greatest close to the string, and smaller as the distance was increased.'

'If the strength of the sound was increased (as may be done on the string of a violin by increasing the pressure of the bow)—then, if the particles of air are supposed visible as before, the lineal extent of the oscillations at all distances respectively would be seen to be increased, as would also the variations in colour which mark the alterations of density; but without producing any effect on the periods of oscillation. And the contrary if the sound was diminished.'

'If it is true that there is a *tympanum* or drum in the ear, then since there is air within the tympanum as well as without (as is said to be painfully proved by its expansion in balloon ascents), there is no difficulty in seeing how the tympanum must be made to vibrate, by the alternate pressure of the air without and the elasticity of that within, in periods equal to those of the vibrating string. And the positive magnitude or violence of this agitation, will at any given distance be in correspondence with the magnitude or linear extent of the vibrations of the string; and at different distances, will diminish when the distance is increased. All of which seems competent enough to be the means by which the sense of hearing, with its concomitant peculiarities, is excited in the organ; and may therefore be lawfully assumed to be the way, till something better is known.'

'The experiment described in § 26 affords proof, that when two strings in unison are sounded at the same time, the oscillations of air derived from them, (on the supposition that they could be made the objects of sense as before), would be seen to form one common set of oscillations in the same periodic time as would proceed from either of the strings separately, but more forcible, or of greater linear extent at any given distance. The way in which this combination takes place, seems explicable on the supposition of the perfect elasticity of the air*. For in whatever manner an oscillation of air from one string may meet and encounter the oscillations from the other, the particles of air which are at any instant compressed and driven together with any particular force in consequence, must react with a force augmented by precisely the same quantity, when the opportunity arrives for expanding. So that it is plainly possible for the result to be, to produce an

* 'By perfect elasticity is only meant, that the particles of air, at every instant and under all imaginable circumstances, exert an expansive force equal to the force with which they are actually compressed; or in other words, that their expansion is not retarded by anything like cohesion, as in the tardy expansion of a cushion. No disturbance therefore arises from the fact, that the positive quantity of elastic force may be affected, by the disengagement of heat or otherwise, during the condensation; for the effects must be contrary and equal in both directions.'

oscillation of greater linear extent, and in the same periodic time as before. And the experiment appears to prove, that this *is* the result.'

'When one of the strings is an Octave or a Fifth to the other, it is presumable that if the movements of the particles of air could be subjected to ocular examination, they would be found analogous to the movements in fixed space made by a small pendulum attached to a greater one, as for instance to the bar of the pendulum of a clock; and in which the respective lengths should be regulated so as to make the number of vibrations in a given time in the proportion of 2 : 1 or of 3 : 2.'

'If this explanation is the true one, it obviates the common argument brought against what is called the coincidence of pulsations. If two strings of equal length, thickness, and tension, are placed at a distance from each other and the ear is placed at some point between them, they sound in unison. Now—it has been argued—if they sound in unison because the pulsations from the two strings coincide at the ear,—then on moving the ear nearer to one string and farther from the other, they ought *not* to sound in unison; because—say the objectors—the pulsations which reached the ear together in the first situation, cannot do so in the other. The answer to which is, that the inference depends on an incorrect assumption of what takes place; the fact being, that the ear receives but one set of oscillations from both strings, and receives it with equal regularity in every situation.'

'The same application of the principle of the air's perfect elasticity, is sufficient to account for the fact, that when two strings vibrate in unison, the pulsations of air from one, do not check or interfere with the vibrations of the other, but on the contrary promote them; and this whether the vibrations have the appearance of obeying the impulse of the pulsations, or of being in any other direction, even the directly contrary. That this is really the fact, is established by the experiment on Harmonic sounds described in § 136; where the vibrations of some part or parts of the longer string, take place in direct opposition to the vibrations of some other of the parts; and yet both are actuated by the pulsations from the shorter string. It is evidently impossible that any set of pulsations can of themselves originate or create a vibration in an opposite direction; but it appears to be established, that if from any other cause such a mode of vibration is once initiated, the pulsations may promote and increase it, in the same manner as if they were in the same direction instead of opposite.'

'The way in which an opposite motion may be initiated, seems explicable on the principle by which an extended rope, on being shaken in one part, vibrates by successive portions producing a tortuous or snake-like motion; which is evidently caused by the *vis inertiæ* of the particles of the rope. In this manner a vibration commencing in the first of the aliquot parts that is affected by the pulsations from the other string, may be imagined to be attended by an opposite vibration in the next; which last, as soon as it occurs, is taken up and encouraged by the effects of the pulsations, in the same manner as if it had been in a different direction.'—*p.* 22.

A Note in the Additions during printing, seems also to

open a prospect of increasing the knowledge of the connexion between causes and effects.

'It is well known that traces of division analogous to that of the musical string, are discoverable in other natural phænomena; as for instance the breadths of the prismatic colours, and the distances of the planets (the last of which is probably what gave rise to the notion of the "harmony of the spheres"). Instead of talking mystically of "the universe being formed by the principles of harmony," philosophers will suspect the existence of some connexion with the successively greatest possible frequency of coincidences in the effects of different sects of periodical impulses.'—*p.* 28.*

The Article cannot be better concluded than with the following speculation of Huygens, extracted from an old Translation of his "Kosmotheoros."

'It 's the same with musick as with geometry, it 's every where immutably the same, and always will be so. For all harmony consists in concord, and concord is all the world over fixt according to the same invariable measure and proportion. So that in all nations the difference and distance of notes is the same, whether they be in a continual gradual progression, or the voice makes skips over one to the next. Nay, very credible authors report, that there's a bird in *America*, that can plainly sing in order six musical notes. Whence it follows that the laws of musick are unchangeably fix'd by nature, and therefore the same reason holds valid for their musick as we e'en now proposed for their geometry. For why, supposing other nations and creatures, endowed with sense and reason as we, should they not reap the pleasures arising from these senses, as we do? I don't know what effect this argument, from the immutable nature of these arts, may have upon the minds of others, I think it no inconsiderable or contemptible one, but of as great strength as that which I made use of to prove the Planetarians had the sense of seeing.'

'But if they take delight in harmony, 'tis twenty to one but that they have invented musical instruments. For, if nothing else, they could scarce help lighting upon some or other by chance; the sound of a tight string, the noise of the winds, or the whistling of reeds,

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* Another observation is, that there are curious sequences or trains of numbers, among the recurring decimals in the Collective System. This would not have been thought worth noticing, but for an impression that appearances of the same kind have been noted lately in some scientific work which cannot now be recollected.

The measure on degree 15 of the Collective System, is the only one in which the division has not been carried on till it ended either in no remainder or a recurring decimal; and it would go to twenty-seven figures before the decimal recurs.

It is plain that in all possible cases of the kind in question, the division must come to an end by the occurrence of either a recurring decimal or no remainder, within a number of figures not greater than the number expressed by the divisor. For the number of different remainders cannot be greater than this; and the instant there occurs a remainder which has occurred before, a recurring decimal arises.—*Added in* 1839.

might have given them the hint. From these small beginnings they, perhaps, as well as we, have advanced by degrees to the use of the lute, harp, flute, and many stringed instruments. But altho the tones are certain and determinate, yet we find among different nations a quite different manner and rule of singing; as formerly amongst the Dorians, Phrygians, and Lydians; and in our time among the French, Italians, and Persians*.'

There seems as little doubt that there must be music in the planets, as that the three angles of a triangle in the planets must be equal to two right angles; provided only the materials exist for reducing it to act.

On the whole, there is in these investigations what ought to rally the monochordists, and give heart of grace to those who see in every new province added to the dominions of sound reason, a pledge for the security and future increase of her aggregate power. The two chief points ascertained appear to be, first, that the theory of the *Double Dissonances* goes to doing away with difficulties as to what is correct harmony, and the terrors of "the Wolf;" and secondly, that the rigid execution of the divisions of correct harmony on all instruments, is attainable to an almost unlimited extent of changes of key, by the transfer (with little addition) of the rules required for the divisions of the "Temperament of Fifty-three."

Postscript.

From the Westminster Review for 1 *July*, 1832.

One of the authors of the musical articles in Rees's Encyclopædia (Dr. Burney and Farey senior) says in the Article on *Temperament*, "No experience has yet been brought to show "that the human voice sings tempered notes; not even when "accompanied by tempered instruments. It seems to us, on the "contrary, that an exercised voice, guided by a good ear, sings "true, even though accompanied by a mis-tuned instrument, "as harpsichords most frequently are, especially in transposed "keys."

If this is just, it explains the harmonious effect obtained from human voices, as for instance in glee singing. And what holds good of voices, is probably good to a certain extent of

* From a Translation of Huygens's ΚΟΣΜΟΘΕΩΡΟΣ, entitled, 'The Celestial Worlds Discovered; or, Conjectures concerning the Inhabitants, Plants, and Productions of the World of Planets, written in Latin by Christianus Huygens, and inscribed to his brother, Constantine Huygens, late Secretary to his Majesty, King William. London: printed for Timothy Childe, at the White Hart, at the west end of St. Paul's Churchyard, M.DC.XCVIII.'—*Taken from the Harmonicon for Sept.* 1829.

violins; as being in the same manner under the direction of the ear.

All this goes to prove, that there *is* such a thing as correct harmony, and that it would be important to ascertain and cultivate it*.

WESTMINSTER REVIEW, 1 April, 1832.

Art. XVI.—*Rapport fait au nom de la Commission chargée d'examiner le projet de loi sur les Céréales, par le Baron Charles Dupin, Député de la Seine. Séance du* 5 *Mars* 1832.

WHEN two great nations, that used to shed each others' blood like fighting-cocks for the benefit of the knaves that governed them, have had the genius to find out the fraud of their respective keepers and enter on a course of mutual good instead of evil, it is probable there will be found a kind of interlocking in the benefits which they may derive from the example or the knowledge of each other. It is admitted, in the teeth of the deception carried on upon this point by the interested, that in both the major and the minor morals of society,—in all whereby the private conduct of the individual is to act upon the happiness of the community,—the French people have left their ancient enemies behind. But we of this side the water take the liberty to think, that we are more advanced in the knowledge which relates to the effect of the public acts and operations of one part of the community upon another;—or at all events in the practical diffusion of it, which is what makes it available to public use.

In this view it is painful to perceive the leaders of a people to whom this country owes so much, clinging to the beggarly elements of gone-by darkness, and putting on the cast clothes of English ignorance just when they will fit us here no longer.

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* The following extract from the work of a practical musician appears in point.

'There are many degrees of false intonation: some singers are false to a degree that admits of no mistake in their case; but others have it so slight as to be scarcely perceptible to the generality of auditors; but still, even to those auditors who could not tell that the voice was out of tune, the general effect does not please. Those kind of singers will execute passages with the greatest skill, but they have little or no effect. Why? Because in all their embellishments one or more notes are not in perfect tune. In fact my readers may draw one certain conclusion that wherever they hear a singer, who appears to have a good voice, executes well, and seems to have every requisite to be a good singer, but who, with every exertion, cannot arrive to be a decided favourite with the public, they may be certain that in nine cases out of ten such singers labour under a slight error of intonation, which though not sufficient to be quite apparent, still always prevents the singing from giving a perfectly agreeable sensation to the auditor.' —*Costa's Analytical Considerations on the Art of Singing.* Extracted from the Morning Chronicle of 7 Sept. 1838.—*Added in* 1839.

Who, but a desponding Tory, in England, would wail, for example, over nature's mismanagement in respect of agriculture, in such terms as follow?

'Manufacturing industry, more fortunate in this respect than agricultural, has the power of obtaining, in a time that shall be fixed upon, the precise quantity and quality of products it thinks necessary for its speculations. But agriculture, even when carried to most perfection, having to struggle daily with climate, irregularities of seasons and accidental unfavourable weather, can never foresee or calculate the abundance or deficiency of its harvests, and their feeding powers.'

'Thus those kinds of produce which nations [*les peuples*] would have the most interest in rendering invariable in their value, quantities, and quality, are precisely those which *the mysteries of nature* make impossible to compute beforehand, or to foresee in their future stages, even the least remote.'—*p.* 2.

Does any mystery of nature conceal the fact, that different countries have been created under such circumstances as make it practically impossible, that a partial failure in the harvests of one, should not be remediable by communication with the others, if man, in the wisdom of his absurdity, could be persuaded not to stand by to prevent? And is it not plain, that the suffering to one country, would be balanced by a corresponding profit to the other; and thus, as nature presented the cup of suffering and of profit to each by turns, the movement of the great machine would be kept up with the least practicable aggregate of human evil?

Nothing is more common than for fallacies to start with professions of zeal for the very contrary of what their end is to promote. In England at least, they almost always do so. In this view, what follows is to be looked on with a suspicious eye.

'In the same spirit of selfishness, the interest of agriculture was continually represented as opposed to that of manufactures, and the interest of the workshops to that of commerce. Laws were called for, which were to serve one of these interests at the expense of the others. It was gravely affirmed that manufactures could only become rich at the expense of agriculture, and agriculture at the expense of the workshops. It was declared that land is never well cultivated but where manufactures are kept away, and that cultivation decays in places where manufactures flourish.'—*p.* 5.

This is all very good, if it is meant to be what it seems. But *is it?* In England such a flourish generally ends in an endeavour to persuade the consumers, that when a particular set of traders robs them by Act of Parliament, they have a community of interest in the fact. The trick is in transferring what would be true under a just state of things, to an unjust. All men

are interested in the success of one another; therefore rejoice in the prosperity of your brother whose hand is in your pocket.

The Commission is very *dark*. A Committee of the English Lords or Commons might try to prop up the obsolete principle of the Navigation Law in practice; but none would be found so devoid of tact as to brave public opinion by a sentence like the following.

'The same Act secured a preference in the scale of import duties to grain brought in English vessels, over that in foreign bottoms; *a measure full of reason and patriotism*, which was wisely renewed after the general peace.'—*p.* 9.

Assuredly no English Committee would fall into the *niaiserie* of saying this in words, however much the members in their hearts might lean to the system of setting men to create wealth by robbing one another. It is not that the sounds of "powerful navy," "wooden walls," "country's glory," have lost their force in England, any more than the corresponding sounds in France. But Englishmen by dint of pains and patience, have had the knowledge forced upon them to a great extent, that all that is paid to an English ship-jobber for the sake of bringing goods in his dear ship instead of the foreigner's cheap one, is taken first from the British trader of some kind with whom the consumer would have spent the difference if it had been left with him, and once more from the consumer besides; and that this, instead of being the way to make a nation rich and powerful by sea or land, is the way to make it poor and contemptible everywhere. The jobbers do their best to keep the secret; but the people knows too much, and the day for the flourishing of that kind of public mischief is gone by in England.

What is true of shipping or corn, the public knows to be equally true of everything else; and therefore it may be said to have penetrated the complicated fraud, which took the sum of the public losses and called it the public gain.

It is hard upon the French people to have the absurdities of England thrust down their throats as good examples; and it is hard upon both countries, that what may be called "the shameful parts" of one, should be the objects selected for the contemplation of the other. Let the French copy English wisdom, English virtue, if their rulers think they can benefit by the imitation; but let them not be called upon to follow what Englishmen despise and ridicule, and array themselves in the worn-out fool's-caps of our English Punchinelloes.

"When Adam Smith wrote his immortal work on the Wealth of Nations," could he ever dream of seeing such a use made of it as is next proposed to the French Chamber?

'When Adam Smith wrote his immortal work on the Wealth of

Nations, he proved victoriously that nations where the arts are far advanced may pay much higher wages to the labourer, and yet, through the division of labour and the employment of improved tools, machines, and instruments, may manufacture at a much lower price than ignorant and poor nations, among whom the wages of labour are nevertheless very low.'

'At the same time he saw, that the most advanced nations have not the same advantage in respect of the produce of agriculture; he was decidedly of opinion that the industrious and rich nations, where the payment of labour is high, have very little power to compete, in the cheapness of agricultural produce, with poor and merely agricultural nations.'

'If the author of the "Wealth of Nations" had lived in our times—'

he would never have come to the conclusion that has been laid before the French Deputies. The French have no right to produce our Adam Smith to make a fool of him; or, at all events, no claim to do it without a protest against the folly.

If the author of the "Wealth of Nations" had lived in our times—

'he would have allowed that a series of circumstances which have been long in train, made it impossible for countries far advanced, like France and England, to raise corn at the same price as some other nations, like the Poles and Russians, among whom &c. &c.'—*p.* 12.

He would have allowed all this, but he would not have arrived at the babyish inference contained in the report of the French Committee, but the directly contrary. I cannot make shoes for my horse for less than three times the expense of bringing them from the commune across the river. "If the author of the Wealth of Nations had lived in our times," infers the French Committee, he would have advised the making a law to prevent the possibility of a man's yielding to the temptation of buying the cheap shoes. "Buy the cheap shoes," would have been Adam Smith's advice, "and laugh at the simpletons who tell you that the impossibility of getting the shoes cheap on your own side the water, is anything but the reason why you should send for them to the other."

The French Committee is plainly beset with the delusion, that traders exist for the purpose of being kept at the community's expense, and not of supplying the community with what the community may want. If it is established that a certain trade is not wanted, or is wanted to a diminished extent in consequence of the discovery of cheaper markets, the inference of the Committee is, that the community should be cut off from those cheaper markets, as the means of forcing it to maintain the traders it does not want. Their inference is, that in order

to give a thousand francs to the trader that is not wanted, a thousand francs must be cut off from what would be expended on some other French trader if the consumer were left to expend his income at the best market, and a thousand at the same time lost by the French consumer besides. To our enemies be such statesmanship; it is because the French are *not* our enemies, that it is grievous to behold them under the direction of such folly.

'Here then, in four years, is the exorbitant sum of 185,563,078 francs paid by France to foreign agriculture for corn. This sum, which represents the value of 800,000 tons of grain, is as much as, for four years, would keep 750,000 persons.'—*p.* 33.

This must be what David meant by the "madness of the people." A nation removed from us by a narrow channel, which the insanity might cross as easily as the cholera, has paid 185 millions of francs for corn, for no earthly reason but because it got 800 thousand tons of it at half the price it could have got it in any other way. The French are gone deranged, and the Chamber of Deputies more than hints so. Here was the food of 750 thousand persons all got at half price, to the infinite loss and damage of—*the Chamber of Deputies.* These men have corn to sell. They have musty victual, that wants eating. No other earthly reason can bring their conduct within the scope of credibility.

Alas, will the time ever come, when government shall cease to be the job of jobs, the *refugium peccatorum* for all stray follies and decayed unreasonablenesses which could not show their faces for an hour if applied to the private concerns of life? *Quàm parvâ sapientiâ regitur mundus,* may be learnt in other countries than where the maxim was first volunteered.

But the Committee decrees itself an ovation, for putting down "the vague generalities of political economy." Suspect every man, that talks of putting down vague generalities. They are always people to whom it is odious to think, that two and two should everlastingly make four. Be firmly persuaded, that the hatred of vague generalities, means nothing but the introduction of some private fallacy. All nature is one great generality. The smallest of all reasoners, are those who demand a distinct law for every separate case, and expect men to gulp down their insulated blunders, in defiance of what the common experience of mankind informs them must be the general rule.

'Here is the place for refuting a strange error committed by some people, who give themselves up blindly to the abstract generalities of political economy. What harm is there, they say, in going to the foreigner for any quantity of agricultural produce? Instead of its being a subject of regret to France, she ought to be glad of it; for

beyond doubt the foreigner will increase his purchases of French produce, when France increases her purchases of the foreign. And they demonstrate the necessity, the infallibility, of this compensation, by reasonings of admirable subtlety. By this account, you see, our national manufactures should be better off, and export more of their productions, in proportion as our agriculture gave its produce in less quantity, and the agriculture of other nations drove out our own to its more complete destruction.'—*p.* 34.

This is meant to be triumphant; especially when backed by the assertion that in the three years of 1825, 1826, and 1827, which were great corn years, the amount of French manufactures exported was greater by 11 millions of francs (about 450,000*l.*) than in 1828, 1829, and 1830, which were bad corn years, and in which 134 millions of francs (upwards of five millions sterling) were paid to foreigners for corn.

Admitting these data without examination, they prove nothing but that the Committee has made a huge blunder, such as any set of men committing out of office would never hold up their heads again as men of reputation for business-like discretion. The Committee wants to prove, that it is a bad thing for French industry that corn should be bought from foreigners; and by way of proving it, what does it advance? Not that the sales of French industry were less upon the whole than they would have been if the purchases of foreign corn had been prohibited;—which is the only thing that could have proved their point. But that the *sales to the foreigner* were less, than they would have been if the purchases from the foreigner had been restrained by law. Will the Committee assist its hearers with its opinion, whether the corn procured from foreigners was got for nothing;—if it was not, in what manner it was paid for, unless in French manufactures or else in imported foreign products, bullion or coins included, which must themselves be bought by the exchange of French manufactures somewhere else;—and finally, by what process known to human reason it can be shown, how when a new trade was created which must be paid for in French exports either directly or circuitously, the result should be that the demand for French exports should be less than before,—unless the effect should have been produced by foreign and unconnected causes, which swallowed up not only the natural tendency to the increase of exports, but eleven millions more?

If the French agriculturists had less to spend in consequence, it is plain that somebody else, viz. the consumers, must have had more; and if the consumers did not go to precisely the same kind of shops that the agriculturists would, there might be a loss to this particular kind of shops, but it is equally clear

there must have been a gain to some other. The farming labourer might spend less in woollens, but the Parisian labourer who ate cheap bread spent more in wine. And why is a Parisian labourer to go without his wine, with no earthly result but that a woollen manufacturer shall make a profit instead of a wine-grower? Depend on it, sense and reason have the same laws in all latitudes. If a man was innocently to relate, that he had been in a place where the longer he walked in the direction of a given point, the farther he was off, he would only be an object of ridicule. This very thing happened though to the Polar travellers; but they took care to let out the secret that an accidental shift of the ice carried them back two miles for every one they moved upon its surface, and did not come home claiming the merit of a discovery like that of the French Committee.

But the French Committee do worse than this. They put down opposition with "*les célèbres hommes d'état, les Canning, les Liverpool, les Robinson, les Grant, et surtout Huskisson,*" whom they describe as "*reconnoissant que* 60 *schellings est le prix nécessaire du quartier de froment.*" Do they not know, that these were all men struggling between half knowledge, and the fear of offending dishonest interests from whose dominion the public mind had only begun to conceive the possibility of disfranchisement? Truly the *Dii minores* of England make a humbling spectacle, as held forth by the men of the *juste milieu* for the adoration of the great nation.

Near the end of their Report, the Committee undertake "to proclaim another principle," which they say was admirably demonstrated by the author of the Wealth of Nations.

'A nation is in a declining state when, in consequence of a succession of suffering in some important branch of the national wealth, agriculture, for example, having received a blow, reacts on the rest of the social state; the prices of every thing give way under the weight of the general distress, and the reward of labour falls to less and less.'

'On the other hand, when the society prospers, the consequence is a natural and moderate progression in the remunerative price of every kind of industry, and at the same time a progress at least of equal magnitude in the price of labour, which represents the well-being of the labourer, or in other words, of the mass of the people.'—*p.* 91.

If a wager had been depending on stating what Adam Smith did not say, it could not have been won more successfully than by this. The passage alluded to, is surmised to be the following.

'It is in the progressive state, while the society is advancing to the further acquisition, rather than when it has acquired its full complement of riches, that the condition of the labouring poor, of the great

body of the people, seems to be the happiest and most comfortable. It is hard in the stationary, and miserable in the declining state. The progressive state is in reality the cheerful and the hearty state to all the different orders of the society. The stationary is dull; the declining melancholy.'—*Wealth of Nations.* Book I. Ch. 8.

In this there is not a word about agriculture having received a blow, and reacting on the rest of the social state; all this is pure imagination. What the author was aiming at, was in fact something virtually opposite to the use here attempted to be made of it. The spirit of his proposition is, that in a new country, where the resources of the soil are yet undrawn upon, wages are high, and the state of the population at large is comfortable. When the attainable produce can no longer be increased, the condition of the community is dull; and if it begins to retrograde, miserable.

There is no use in complaining of ignorance on these points. Knowledge on such subjects must proceed upwards and not downwards. It never came from a Chamber of Deputies to the people; all Chambers talk nonsense for twenty years after the people have begun to laugh at it. It is when the middling and working classes become as well acquainted with their interests in large masses as they are in small,—that there will be an end of impositions like persuading them it is for the public interest to eat dear corn, and import in dear ships. The monopolists in France call this, an English attempt to put down French production; and in England it used to be called French philosophy. The wine-growers, in France, are the men who ought especially to look to it. There is not an English yeoman or good shop-keeper that ought not to drink his pint of claret daily if he likes it, if the commerce between the two countries was free: but the Tories step in, and say we shall drink *swipes and blackstrap.* There is no help for it. Nations, like men, will come to years of discretion in time; and till they do, they must suffer.

PROGRAMME to the WESTMINSTER REVIEW for 1 July, 1832.

BENTHAM is dead. As the Arabs say of their great men, أنجضر "*inhádhara;*" he is sent for to The Presence. The "second" teacher of The Greatest Happiness, as he a few years ago was called, is gone to join "the First;" and it is not small matters of theology, that will prevent him from being greeted as good and faithful servant.

To lament for a man who died covered with honour, not with honours, at more than the natural term of human life,—

would be unreasonable as useless. Let us rather rejoice, that his active labours were prolonged for nearly sixty years, and that with a portion of them we have been contemporary.

His writings have been a leading instrument,—it would perhaps be no error to say *the* leading instrument,—in effecting the change of opinions at home and on the Continent, which is heaving up the crust of the old world, like the imprisoned waters of the geologists. They have substituted a new rule, a new measure; they have caused the materials of human society to gravitate towards another centre of attraction than before.

Born 15 February, 1748, N. S., in Aldgate, London. Died 6 June, 1832. His first published work was his "Fragment on Government," in 1776; his last, the "Parliamentary Candidate's proposed Declaration of Principles," in 1831. His body, according to directions prepared by him, was applied to the service of humanity by being made the subject of anatomical illustration; a disposition, against which, at that period, there existed many prejudices among the less instructed portions of his countrymen.

QUALIS AB INCEPTO.

WESTMINSTER REVIEW, 1 July, 1832.

ART. I.—*On Political Economy, in connexion with the Moral State and Moral Prospects of Society.* By Thomas Chalmers, D.D. Professor of Divinity in the University of Edinburgh.—Glasgow; Collins. London; Whittaker & Co. Hamilton & Co. Simpkin and Marshall. 1832. 8vo. pp. 566.

THE proper business of every man and every hour, is to know as much as he can of political economy. Not but it may also be desirable that he should learn something of arithmetic and book-keeping by double entry, be acquainted with the properties of the lever and inclined plane, and have a portion of information touching the nature of the planetary motions and the divisions of the surface of the terraqueous globe. But all these acquirements may only render him a useful slave; and the other is the education which must enable him to keep the benefit of his labours for himself. It has indeed long been defined to be the science of preventing our betters from defrauding us; which is sufficient to account for its being eagerly pursued on one hand, and vilified on the other.

In such a state of things, great are the obligations of society to any individual, who possessing character unimpeachable for intelligence and virtue, will descend as a mediator between conflicting parties, and perform the office of the alkali that

brings the oil and water of the community into combination for the removal of the public stains. No office more honourable has ever been exercised by learning and experience; even the legislation of the poet in the golden age of the Saint-Simonians, must yield to it in the double ratio of vigour and extent of influence. And to arbitration of this kind must every public question come. Men in these days cannot contend for ever; the times are gone by with the feudal system, when the meat and drink of mankind was quarrelling. Each side makes out the stoutest case it can; and at last comes the arbitrator, and strikes the balance between both. There may not be any defined power to enforce acquiescence in his decisions; but there is a virtual energy in the combined exercise of reason and authority, which induces such a quantity of adhesion on the part of the great masses of the public, as makes subsequent resistance unavailing. It may not settle all truth for ever and for ever; but it may make a great step towards the settling of so much truth, as shall be brilliantly useful to the present and succeeding generations.

Great outcry is made against theories and theorists; and why should there not, if the theories are wrong? Theory means seeing the consequences of one thing in another thing. There was once an outcry against the theory of arithmetic; and the last place where it made its stand, was probably the quarter-deck. Yet even there it was put down at last, by the palpable proof which was exhibited, that offensive as it might be to the prejudices of the ancient mariners, the casters of figures really knew something about the matter, and could prophesy of the land's whereabout, when nobody else could tell whether it lay to the right hand or the left. But this result depended on the correctness of their assumptions and the accuracy of their inferences. Whatever therefore increases the fidelity of either, must in all analogous cases be an instrument of success.

Highly important in this view, is the sifting and re-examination given by the author in his First Chapter, to what has been assumed by economists as the *histoire raisonnée* of the commencement and early progress of culture and population. No man can doubt that the early proprietors of a vacant territory will fall, to the best of their instinct, on the superior qualities of soils and situations first. But it by no means follows that this shall be their period of ease and pleasantry; on the contrary the odds are, that this, as the Scottish tongue expresses it, is *just* the season of their greatest difficulties, and that the fatness of the fattest of the new found land is barely sufficient to keep the bodies and souls of the adventurers together for more auspicious times. And when increase of mouths brings

cultivators to land that had been considered secondary to the other, it as little follows, that the cultivators of this secondary land shall not on the whole be in greater ease and comfort than were the cultivators of the first at the same comparative epoch of its cultivation. The fathers of New England may have occupied the intrinsically best land in 1632; but it does not follow that agricultural improvement may not be a safer and better business there in 1832, than it was to the fathers of New England.

But there is another way in which the descent to inferior land may be effected, without any diminution in the comfort of the labouring portion of the community.

'Cultivation may be extended by an improvement in manufacturing, as well as in agricultural labour. It may be conceived, of the land last entered, that in return for a certain quantity of labour, it yields the subsistence of a hundred families—and that the land next inferior to it cannot be profitably cultivated, because in return for the same labour, it yields the subsistence of only ninety families. Now, overlooking for the present, the element of profit, one might conceive these hundred families to be made up of seventy belonging to the agricultural, and of thirty belonging to the secondary class,—it being the employment of the latter to prepare, for the whole hundred, the second necessaries of life. It matters not whether there be such an improvement in agricultural labour, that sixty can do the work of seventy, or such an improvement in manufacturing labour, that twenty can do the work of thirty. In either way, ninety labourers can do as much as a hundred did before; and whereas, formerly, land behoved to return for their labour the subsistence of a hundred families, ere it could be taken in, it may now be taken in, though of such inferior quality, as to return the subsistence of but ninety families. By the former improvement, the agricultural labourers necessary, for a given effect, became fewer than before,—by the latter improvement, though still as numerous, they would require the services of fewer secondaries than before. It is thus that a step of improvement in manufactures alone, can give rise to an onward step of extension in agriculture—and just because a method has been devised for the fabrication of as many yards of cloth, by fewer hands, soils of poorer out-field, than any that had yet been reached, may now be profitably entered upon. An improvement in the form of the stocking-machine, may, as well as an improvement in the form of the plough, bring many an else unreclaimed acre within the reach of cultivation.'—*p.* 9.

It will here inevitably be asked, what is to become of the ten labourers, whether of the secondary or agricultural class, who are thus supposed to be dispensed with and thrown out of a claim for food. To which nature, who is marvellously concinnous in her operations, has provided the ready answer, that they must improve manufactures, with the view of obtaining

from the class of landed gentlemen whom the same progress of things will have begun to call into existence on the superior soils, a portion of the produce which will be ready to be disposed of for luxuries or comforts a little above the common. If huckaback was before woven for the farmer's tablecloths, they must begin to weave diaper for the squire's; and if they cannot, they and the class to which they belong will live seven on the allowance of six, or as the case may be, till somebody or other will relieve the mess at large by taking to the weaving. If it should be urged, that all the squire has, will be consumed in adding to the population of his class; the answer is, that he will make a drawback for the diaper. The squires will come to some kind of middle term; they will increase and multiply after their heart's imaginations, but one part of their imaginations will be after tablecloths, or whatever else may be the luxuries open to their station, and they will secure these, though at the expense of some final diminution of the squire-descended population.

'It is thus that, by a more strenuous industry, and a more effective machinery together, the poorer soils may, to a certain extent, be forced to yield an equal, or, perhaps, a more liberal subsistence to the labourer, than at earlier stages in the process of cultivation. Yet it must be quite evident that, whether in single countries, or in the whole world, it is a process which cannot go on indefinitely. The time may be indefinitely distant, and indeed may never come, when the absolute and impassable barrier shall at length be arrived at. But to be satisfied that there is such a barrier, one has only to look to the extent and quality of the land in any region of the earth. By labour we might grind even the naked rock into an arable soil,—but a soil thus formed never would return the expense of food bestowed upon the labourers. In every country there is an upland or outfield territory, which will always bid defiance to agriculture. And even though it were not so—though to its last acre it possessed a uniform richness—though the plough might be carried over the whole of the mighty continent, and should find an obstacle no where but at the margin of the sea; yet, as sure as that every country has its limit, and every continent its shore, we must acquiesce in it as one of the stern necessities of our condition, that the earth we tread upon, can only be made to yield a limited produce, and so to sustain a limited population.'

'It seems very generally admitted, that should it ever come to this, the population, brought to a stand in respect of numbers, must either have to encounter great positive distress, or must anticipate this distress by a preventive regimen. In the midst of all the minuter criticisms to which the doctrine has been exposed, the great historical fact remains unshaken—that, let the means of subsistence be increased however largely and suddenly, this is sure to be followed by a corresponding increase of population. Every state and country in the

world bears evidence to this truth—whether in the steady augmentations of Europe, or in the gigantic strides that are now making in the population of America. The invariable connection, as of antecedent and consequent, between a great extent of fertile and unoccupied land, and a great multiplication of families, when once it is entered upon, is too palpable to be obscured by any sophistry, or by the allegation of any mystic principle whatever. Yet the power to support, and the power to create a population, are just as distinct, the one from the other, as the constitution of the external world is distinct from the constitution or physiology of human nature. It is not an increase of the former power which gives rise to an increase of the latter—it only gives situation and space for the development of its energies. Should a population, when every let and hindrance of a straitened subsistence is removed, be able to double itself in fifteen years—it would still have the inherent ability of doing so, after that every acre on the face of the globe had been advanced to its state of uttermost cultivation. The power of population would then be kept in perpetual abeyance—with a constant disposition to transgress beyond the limits of the world's food, and as constant a check on the expansion of the capabilities which belong to it.'

'All this is very generally allowed; but then the imagination of many is, that not until the world be fully cultivated and fully peopled, shall we have any practical interest in the question. They seem to think of the doctrine of Malthus, that the consideration of it may, with all safety, be postponed, till the agriculture of every country and every clime have been carried to its extreme perfection; and that, meanwhile, the population may proceed as rapidly and recklessly as it may. When a household is straitened by its excessive numbers, or a parish is oppressed by its redundant families—they would bar every argument about the proximate causes of this inconvenience, by the allegation that there were still thousands of unreclaimed acres at home, or millions in distant places of the earth, though of as little real or substantial consequence to the suffering parties, as if the land were situated in another planet. They appear to conceive, that ere any body can be felt as an obstacle to our progress, it must have come to a dead stand—not aware that to act as a check or impediment, it has only to move more slowly, though in the same direction, than at the rate in which we are advancing ourselves. They proceed on the idea, that no shock or collision can be felt but by the stroke of an impellent on a body at rest—whereas it is enough if the body be but moving at a tardier pace. In the one case, the strength of the collision would be estimated by the whole velocity—yet, in the other, there might still be a very hard collision, though estimated only by a difference of velocities. It is thus that, for the continued pressure of the world's population on its food, it is far from necessary that the food should have reached that stationary maximum, beyond which it cannot be carried. It is enough, for this purpose, that the limit of the world's abundance, though it does recede, should recede more slowly than *would* the limit of the world's population. A pressure, and that a very severe one, may be felt for many ages

together, from a difference in the mere tendencies of their increase. The man, who so runs as to break his head against a wall, might receive a severe contusion, even to the breaking of his head, if, instead of a wall, it had been a slowly retiring barrier. And therefore we do not antedate matters, by taking up now the consideration of Malthus' preventive and positive checks to population. There is scarcely a period, even in the bygone history of the world, when the former checks have not been called for, and the latter have not been in actual operation. To postpone either the argument or its application till the agriculture of the world shall be perfected, is a most unpractical, as well as a most unintelligent view of the question—for long ere this distant consummation can be realized, and even now, may the obstacle of a slowly retiring limit begin to be felt. The tendency of a progressive population to outstrip the progressive culture of the earth, may put mankind into a condition of straitness and difficulty—and that for many generations before the earth shall be wholly cultivated. We are not sure, but it may have done so from the commencement of the race, and throughout all its generations. Certain it is, at all events, that the produce of the soil cannot be made to increase at the rate that population *would* increase. Neither mechanical invention nor more intense manual labour is sufficient for this purpose. On the supposition that the numbers of mankind were to increase up to their natural capability of increase, no human skill or human labour, though doing their uttermost, could suffice for raising a produce up to the population—nor will the mass of society ever be upheld in comfort, without the operation of certain other principles, by which to restrain the excess of the population over the produce.'—*p.* 17.

'If it be not possible, then, to sustain in comfort and sufficiency the working classes, by keeping up the produce to the population, when suffered to proceed according to its own spontaneous energies—there seems only to be another alternative for the achievement of this great problem, that of keeping down the population to the produce. We know of no right, or comfortable, or efficient way of doing this, than by the establishment of a habit and a principle among the labourers themselves. If they will in general enter recklessly into marriage, it is not possible to save a general descent in their circumstances. By the operation of causes already explained, a population may flow onward, in the way of increase, from one age to another, without any abridgment on the comforts of our peasantry. When these are trenched upon, it is no longer a flow—but we should call it an overflow.'—*p.* 22.

This is all strikingly true; and mixed up with many new lights which increase the final knowledge of the subject, at the same time that they enliven the road. It all, however, forms only a branch, or leader, towards the main conclusions in which the world is interested. And the apprehension may be, (which it is useful to intimate thus early,) that the whole of this belongs to one side of a complication of causes, the

other side of which demands more attention than is finally given to it ;—that the case is in fact something like that of a philosopher, who in discussing the planetary motions should have bestowed his attention on the centripetal force to the injury of the centrifugal.

The next Chapter is on the " Increase and Limit of Employment ;" which forms the natural sequence to the subject of the other.

‹ But though the progress of cultivation, and the produce extracted by labourers from the last and farthest margin of it, do truly represent both the progress in numbers, and the state in respect to comfort, of our operative population ; and though, when viewed in this way, the conclusion seems irresistible, that there is a slowly-receding limit to the means of subsistence, on which population is ever pressing, so that if it press too hardly, it must straiten and depress the condition of labourers—yet we hear of a thousand other expedients for an amelioration in the state of the working classes of society, beside the only effectual expedient of a general principle and prudence in regard to marriages, which it is for the working classes of society, and them alone, to put into operation. What gives plausibility to these expedients is, that society is so exceedingly complicated a thing ; insomuch that, when viewed in some one aspect, it holds out a promise of improvement or relief, which, under another or more comprehensive aspect, is seen to be quite illusory. For example, when one witnesses the vast diversity of trades, or employments, in society, by each of which, or at least in the prosecution of which, so many thriving families are supported, then it is conceived, that the high-way for the relief of the unprovided is to find them a trade, to find them employment. Or, when looking to the connection between capital and labour, and perceiving that the office of the former is to maintain the latter—then, on the idea that capital may, by the operation of parsimony and good management, be extended *ad infinitum*, it is held, by almost every economist of high name, that every accumulation of capital carries an addition along with it to the subsistence of labourers. Or again, when one looks to the multitudes supported by foreign trade, in all its departments, the imagination is, that, as agriculture has its capabilities, so commerce has its distinct and additional capabilities ; and that, whatever limit there may be to the power of the one for the maintenance of families, this is amply made up by the indefinite extension which might be given to the other. Again, we often hear taxation vaguely, though confidently talked of, as the great incubus on the prosperity of labourers ; and that, if this were only lightened or removed, there would thenceforth ensue a mighty enlargement both of industry and comfort to the families of the working classes. And then, in the list of national grievances, we hear of the enormous and overgrown properties which are vested in the few—and a general abundance diffused among the many is figured to be the consequence that would result, if not from the spoliation and forcible division of this wealth, at least from the abolition of entails, and

of the law of primogeniture. Or in the absence, perhaps the failure, of all these expedients, emigration is held forth as a sovereign specific for all the distresses of an over-crowded land. And, lastly, after every thing but the moral habit of labourers themselves has been thought of, there follows, in this list of artifices for their relief, a scheme, which no longer existing in fancy, has been bodied forth into actual operation, and is the one of all others most directly fitted to undermine the principle and prudence of labourers—even a compulsory tax on the wealthy for the relief of the destitute, so as to disarm poverty of its terrors, and proclaim a universal impunity for dissipation and idleness. Now that this last great expedient has been adverted to, we need scarcely advert to any of those lesser ones, which, though but the crudities of mere sentimentalism, have been proposed, each as a grand panacea, for all the disorders of the social state,—such as the cottage system, and the cow system, and the village economy of Mr. Owen, and the various plans of home colonization that have been thought to supersede the lessons of Malthus, or, at least, practically to absolve us from all regard to them for centuries to come.'—*p.* 32.

This, again, appears to be all true, under the reservation that there is another half of the story to come. Men in general begin vehemently to suspect, or more properly stoutly to believe, that cow systems and cottage systems and village economies, are all either mere tubs for the whale or at best a shifting of the evil from one set of men to some other set, so long as the limitation upon the food of the community at large is to be permitted to continue. If this is to continue, the sooner the public comes to the conviction the better, that there is no remedy but obstinate refusal to multiply. And the same conviction will be found true, with respect to that degree and portion of limitation, or more properly of pressure, which in all imaginable circumstances however happy, will be discovered to be existing. But still there remains the question, of what the pressure shall be allowed to be. The case is a more complex one than at first appears. On one side of the calculation stands the evil, of the necessity for what is styled prudence, but in plainer language should be submission to suffering; an evil which would be at its maximum in a state of society where the increase of the first necessaries of life was absolutely impracticable, and which exists in other states of society in proportion to the degree in which this increase is slow, laborious, and clogged with obstacles. On the other side stand the causes which prevent or restrain the increase of food; with the examination of how far they are necessary and inevitable and how far not,—how far they are of nature's creating and how far of man's,—how far they exist by heaven's ordinance and how far by Act of Parliament. And the general inference to which the whole inquiry

points,—to put it into a mathematical form, which conveys a clearness to some persons that makes up for its obscurity to others,—is that the happiness of the labouring classes, or the quantity of well-being by which they rise above the melancholy condition in which they exist under an absolute impossibility of any increase, varies as the rate at which the increase of food is proceeding, or in other words as the *fluxion* of the food, $H \propto \dot{F}$. Those may laugh at the form who like; but a mathematical formula, when right, is a terrible modification of truth, a round-shot-like method of conveyance, which goes far and tells dangerously on arriving at its destination.

Another important inference from the phænomena which the author has so much contributed to throw light upon, is that nature infallibly intended there should be rich men. Nothing but artifice the most complicated, and violence the most outrageous, could by possibility hinder this consummation from taking place. And the individuals intended in the first instance to be rich, are manifestly the worthies who succeed in pushing through the difficulties attendant upon breaking up new countries. To be landed gentlemen is the natural reward of the fathers of new settlements, if they are not defrauded by external misgovernment, and live long enough to receive their recompense. It is the prize assigned to the successful in the lottery of a peculiarly hazardous kind of industry. And it is not difficult to see, how well devised it is, and how accordant with the physico-theology which the study of political economy everywhere brings to light, that there should be some distinct provision for raising up out of the proceeds of industry a race of men who can "live at home at ease." Much that improves and much that adorns society, arises out of such a dispensation. And let none be dull enough to mistake this for Toryism; the Tory creed is, that men ought to be *robbed*, to make up such a class. It is against this sentiment that the community at last is up in arms, and has proclaimed a *guerra al cuchillo* against the last rag and remnant of everything that holds by such a tenure. There will be a spending class, but no taking class; the shears are sharpened and set, which whether Jack or Peter holds the handles, will clip their phylacteries into the closest fashion that has been witnessed since the Roundheads. Our forefathers were great at such an operation; and the signs of the times show clearly, that the world is close upon the portion of its course where the phænomenon must be repeated. It is not wealth that is the evil; it is the habit of dishonesty that wealth has got into. The moment a man gets wealth, he begins to cast about for the means of getting more by the plunder of his neighbours; and the government of the country, from the

memory of living men to the late accession of the Whig and Radical dynasty; has been one great joint-stock committee of management, for the organization of the plans of individuals upon this point into an operative whole. Once or oftener has the resistance to it been put down, by the skill of the plunderers in confounding the attack on unjust wealth with attacks on wealth in the abstract, and the awkwardness of the assailants in leaving pegs for the fallacy to hang upon. But honest men, as well as the devil, may grow wiser than of yore; and on no point have they attained more light, than on the distinction between that kind of wealth and property which society is united to defend, and that which it is united to pull down.

'Had no ground yielded more in return for the labour expended on it, than the food of the cultivators and their secondaries, the existence of one and all of the human race would have been spent in mere labour. Every man would have been doomed to a life of unremitting toil for his bodily subsistence; and none could have been supported in a state of leisure, either for idleness, or for other employments, than those of husbandry, and such coarser manufactures, as serve to provide society with the second necessaries of existence. The species would have risen but a few degrees, whether physical or moral, above the condition of mere savages. It is just because of a fertility in the earth, by which it yields a surplus over and above the food of the direct and secondary labourers, that we can command the services of a disposable population, who, in return for their maintenance, minister to the proprietors of this surplus, all the higher comforts and elegancies of life. It is precisely to this surplus we owe it, that society is provided with more than a coarse and a bare supply for the necessities of animal nature. It is the original fund out of which are paid the expenses of art, and science, and civilization, and luxury, and law, and defence, and all, in short, that contributes either to strengthen or to adorn the commonwealth. Without this surplus, we should have had but an agrarian population—consisting of husbandmen, and those few homely and rustic artificers, who, scattered in hamlets over the land, would have given their secondary services to the whole population. It marks an interesting connection between the capabilities of the soil, and the condition of social life, that to this surplus we stand indispensably indebted, for our crowded cities, our thousand manufactories for the supply of comforts and refinements to society, our wide and diversified commerce, our armies of protection, our schools and colleges of education, our halls of legislation and justice, even our altars of piety and temple services. It has been remarked by geologists, as the evidence of a presiding design in nature, that the waste of the soil is so nicely balanced by the supply from the disintegration of the upland rocks, which are worn and pulverised at such a rate, as to keep up a good vegetable mould on the surface of the earth. But each science teems with the like evidences of a devising and intelligent God; and when we view aright the many beneficent functions,

to which, through the instrumentality of its surplus produce, the actual degree of the earth's fertility is subservient, we cannot imagine a more wondrous and beautiful adaptation between the state of external nature and the mechanism of human society.'—*p.* 45.

The negative as here put is something too strong; and may be held to be parcel of a theory by which the author attributes extraordinary properties to the fact of the production of rent. It may be shrewdly suspected, that specimens of all the good things mentioned might have existed, in situations where there should be no such thing as is commonly meant by the rent of land. But the fact that the existence of rent is a cause, and a very principal cause, of these good things in the actual circumstances of this and most other countries, remains untouched by the inaccuracy.

The succeeding Sections attack a form of error, which though weakened is far from being passed away. Our well-wigged ancestors had a devout belief, that there was no cause of want but idleness, and that every boy who came to London and worked as hard as Whittington, was incontinently Lord Mayor. This might be excusable in their times, but their posterity have had bitter reason to discover to the contrary; in spite of which, it does still appear, as if men's blindness to the fact was in some direct ratio to their personal benevolence. Humanity, to this hour, expends itself in making what nobody will buy. The scheme for destroying poverty by mop and broom-making, is daily reproduced with all the variety the vehicle is capable of. A man would have been mobbed till within these few years, who should have maintained that it was through anything but downright refusal to work and to save, that any able-bodied man was poor. Nothing but the public misery, has forced on the public a better knowledge.

'It is thus that, in proportion as the mechanism of social life becomes more complex, it is also all the more bewildering; and, amid the intricacy of its manifold combinations, we lose sight both of the springs and the limits of human maintenance. One very wide and prevalent delusion, more especially, and which has misguided both the charity of philanthropists and the policy of statesmen, is, that the employment in which men are engaged is the source of their maintenance,—whereas, it is only the channel through which they draw that maintenance from the hands of those who buy the products of their employment. This principle has in it all the simplicity of a truism—and yet it is wonderful with what perversity of apprehension, both the managers of a state and the managers of a parish miss the sight of it. Whether we look to acts of parliament, or to the actings of a parochial vestry—we shall find them proceeding on its being the grand specific for the relief of the poor, to find employment for them.

Now, unless that employment be the raising of food, it does nothing to alleviate the disproportion between the numbers of the people and the means of their subsistence,—and if there be a limit, as we have already demonstrated, to the food, we may be very sure that this device of employment will not turn out a panacea for the distresses of an over-burdened land.'

'But the fallacy to which we now advert, is not confined to the matters of practical administration. It may also be recognized in the theories of those who have attempted to adjust the philosophy of the subject. In political economy it will often be found, that the channel is confounded with the source,—and hence a delusion, not in the business of charity alone, but which has extended far and wide among the lessons of the science.'

'And yet it is a delusion which, one might think, should be dissipated by but one step of explanation. A single truism puts it to flight. Nothing appears more obvious, than that *any trade or manufacture originates only its own products.* All that a stocking-maker contributes to society is simply stockings. This, and nothing more, is what comes forth of his establishment. And the same is true of all the other trades or employments which can be specified. They work off nothing, they emanate nothing but their own peculiar articles. Were this sure and simple axiom but clearly and stedfastly kept in view, it would put to flight a number of illusions in political science, —illusions which have taken obstinate hold of our legislators, and which to this moment keep firm possession in the systems of many of our economists. They almost all, in a greater or less degree, accredit a manufacture with something more than its own products. The inclination is, to accredit it also with the maintenance of its labourers. In every transaction of buying and selling, there are two distinct elements,—the commodity, and the price of the commodity; of which price, the maintenance of the labourers is generally far the largest ingredient. Now, the thing to be constantly kept in view is, that a manufacture should only be accredited with its own commodity, and not, over and above this, with the price of its commodity. These two stand, as it were, on different sides of an exchange. To the manufacture is to be ascribed all that we behold on the one side. It furnishes the commodity for the market. But it did not also create the wealth that supplies the price of the commodity. It does not furnish society with both itself and its equivalent. The latter comes from a distinct quarter; and we repeat, that by confounding, in imagination, two things which are distinct in fact, a false direction has been given, both to the policy of States, and to the theories of philosophers.'—*p.* 47.

There may be held to be truth in this, provided impartiality be intended to be maintained between the stockings and the equivalent, which is manifestly understood to be corn. It is true that the stocking-maker cannot do without corn; but it is equally true that the land-owner cannot do without stockings. If one man was condemned to have all stockings and no corn,

and the other all corn and no stockings, the difference would be small; especially if to stockings be added such other articles of dress, as may go more strictly under the title of indispensables. Let it be settled that the stockings shall be only stockings; but at the same time let the corn be only corn.

'This confusion of sentiment appears in a variety of ways. When one sees a thriving and industrious village, and that the employment of the families secures for them their maintenance, it is most natural to invest the former with a power of command, tantamount to a power of creation over the latter. The two go together; and because when the employment ceases, the maintenance ceases, it is conceived of the former, that in the order of causation it has the precedency. We affirm of a shawl-making village, that all which it yields to society is shawls. We accredit it with this, but with nothing more. But it is accredited with a great deal more, by those who talk in lofty style of our manufacturing interest, and the dependence thereupon of a nation's support and a nation's greatness. We hold, that if, through the exhaustion of the raw material, or any other cause, there were to be an extinction of the employment, the country would only be deprived of its wonted supply of shawls; but the prevalent imagination is, that the country would be deprived of its wonted support for so many hundred families. The whole amount of the mischief, in our estimation, would be the disappearance of shawls; in theirs, it would be the disappearance of that which upheld an integral part of the country's population. It is forgotten, that though shawls may no longer be produced or brought to market, the price that went to be paid for them is still in reserve, and ready to be expended by the purchasers on some other article of accommodation or luxury. The circumstances which have brought the manufacture to ruin, do not affect the ability of those who consumed the products of the manufacture. The employment is put an end to; but the maintenance comes from another quarter, and can be discharged in as great abundance as before, on as large a population. Their employment in making shawls was not the source of their maintenance; it was only the channel by which they drew it to their homes. The destruction or stoppage of the channel, does not infer a stoppage at the source, that will find for itself another channel, through which all that enters into the maintenance of our industrious families, might be effused upon them as liberally as before. We dispute not the temporary evils of the transition. We allow that a change of employment may bring individual and temporary distress along with it. But we contend, that the expenditure of those who support our disposable population will not be lessened, but only shifted by this new state of things; and that, after the change is accomplished in the direction of their industry, we should behold as numerous a society as ever, upheld with the same liberality in every thing (with the single exception of shawls, and the substitution of some other luxury, in their place) that enters into the comfort and convenience of families.'—*p.* 50.

Of course there is nothing in this peculiar to shawls. A

parallel phænomenon would take place in agriculture, if either the race of *beans* were utterly to decay, or men and horses were for some reason to unite in refusing to consume them, as for instance might be the consequence of their being proved the cause of cholera and murrain. The bean lands would all be applied to growing something else; and there might be considerable evil in the transition, or even a permanent loss. But still in the main, the ultimate phænomenon would be a transfer.

'But we are further persuaded, that the confusion of sentiment which we are now attempting to expose, has had a most misleading effect on the views and the policy of statesmen: at one time, inspiring a false hope on the promised extension of trade and manufactures; and, at another time, creating a false alarm on the appearance of their decay. Our legislators do ascribe a higher function to trade and manufactures, than that of simply furnishing society with the articles manufactured. They conceive of them as the dispensers of a transcendently greater benefit, than the mere use and enjoyment of these articles. There are other and nobler interests associated in their minds with the trade and manufactures of the country, than the mere gratification and convenience which individuals have in the use of their products. This will at once be evident, if we resolve the manufacturing interest into its several parts,—as the shawl-making interest, wherewith our senate would not for a moment concern themselves, if they thought that all which hinged upon it was the supply of shawls—nor the stocking-making interest, if in their opinion nothing else depended on it but the supply of stockings—nor the carpet-making interest, if it involved no other or higher consideration than the supply of carpets—nor the buckle-making interest, if they did not suppose that, beside owing to it the supply of buckles, we furthermore owed the maintenance and wealth of buckle-makers. And the remark may be extended from manufactures to commerce *. We should have had no grave deliberations on the China trade, or the Portuguese trade, or the West India trade, if something far loftier had not been associated with these respective processes, than that of serving the families of the land with tea, or wine, or oranges, or sugar, or coffee, or tobacco. These mighty commercial interests are conceived to be productive of something greatly more magnificent and national; and not only the income of all the capitalists, and the maintenance of all the labourers engaged in them, but the strength, and revenue, and political greatness of the State, are somehow associated with their defence and preservation. It is forgotten, of each trade and each manufacture, that it furnishes, and can furnish, nothing but its own proper and peculiar articles; and that, abstracting from the use and enjoyment of these, every other associated benefit is comprehended in the equivalent price which is paid for them. All that the wine-trade

* 'In extending the observation from home to foreign trade, we presuppose, what we shall afterwards attempt to show more particularly, that the *terminus ad quem* of foreign trade, is the benefit, or enjoyment, administered by the commodities which it imports, to the inland consumers.'

of Portugal, for example, furnishes to our nation is wine—and, in reference either to the public revenue which arises from it, or to the private revenue wherewith it both enriches the capitalists, and supports the labourers employed in it, these are yielded, not most assuredly by the wine, but by the price given for the wine. The wine-trade is but the channel through which these flow, and not the source in which they originate. But, notwithstanding, there is yet a mystic power ascribed to the wine-trade, as if part of the nation's glory and the nation's strength were linked with the continuance of it. And hence a legislature tremulously alive to the state of our relations with Portugal, lest the wine-trade should be destroyed. Now though, from the interruption of these relations, or from any other cause, the wine-trade, on the one side, were destroyed, the counterpart wealth, on the other side, would not be destroyed. It would remain with its owners, to be expended by them on the purchase of some new luxury in place of the wine; by the natural price of which, the same return could be made to capitalists and labourers, and by a tax on which, the same revenue might be secured to government as before.'

'It must be obvious, that employment in agriculture is not an indefinite resource for an indefinite population—seeing that it must stop short at the land which refuses to yield the essential food of its direct and secondary labourers. And it should be equally obvious, that as little is employment in manufactures an indefinite resource—seeing that the definite quantity of food raised can only sustain a certain and definite number of labourers. The latter position seems, on the first announcement, to carry its own evidence along with it; yet there is a certain subtle imagination in its way, which we have attempted to dispose of. Our argument rests on the veriest truism—that a manufacture is creative of nothing beyond its own products. But truism though it is, it has been strangely overlooked, not only in the devices of the charitable, but both in the policy of statesmen, and in the doctrinal schemes of the economists. Yet we think a sufficient explanation can be given, both of the manner in which the perverse misconception at first arose, and of the obstinacy wherewith it still lingers and keeps its ground amongst us.'—*p.* 52.

The learned author's truism is not true. The trade to Portugal is to exchange knives which we cannot use at home, for wine which we can. If we had a soil of granite, we might still live in plenty on the meat and drink obtained for our manufactures abroad; and in such a case, to stop the trade to Portugal would clearly be to stop one inlet to the national support. If it is urged that the knives might be sent to France to buy brandy instead, it must be at a loss; for the fact of a gain being made by it, was the only reason why they were not sent to France before. The fallacy is in sinking the fact to please the landlords, that manufactures, through the medium of foreign exchange, can be as distinctly the procreation of the national food, as if it fell out of the manufacturers' machines. A manufacture at Sheffield that is exchanged abroad for corn, as far as England

is concerned creates corn and nothing else. The fallacy is the old one of the landed tyrants, of first assuming that there is no corn to be eaten but their own, and then talking of it as if this was an ordinance of nature. A zoologist might as well describe horses as naturally without tails, because men cut them off. The "definite quantity of food raised," should have been followed by the words, "under a tyranny which prohibits commerce by Act of Parliament." All efforts to establish any essential distinction in favour of agriculture, are based on this omission. When this is avoided, all kinds of production will be found to be subject to the same laws, and all alike applicable to the creation of national sustenance and wealth; as has already been authenticated by M. Say on one prominent particular in which they were supposed to differ, namely the circumstance of being produced under what may be called a natural monopoly. [*Say*, Vol. iv. Ch. 20. *Translated in the Westminster Review for April* 1832. *See p.* 87 *of the present Volume.*]

If a number of human beings were embarked on a six months' voyage, with the understanding that they were to work in various ways for the purser on the passage, and receive from him such portions of beef and biscuit as he should be induced to give for their work under the competition that would arise,—it is as plain as most things in this world, that if such purser with a view to making the best of a limited capital, had gone to sea with only three months' stock, no possible diligence among the operatives could turn it into six, or by any subtlety of man create a plenty for the voyage. They that worked best and hardest might fare better than the rest, and it is even possible that some of them might obtain for themselves a tolerable competency. But if these got more, somebody else must get less; and it is as clear as Euclid, that the crew must be on half allowance in the aggregate. And if any well-meaning individuals should insist on the extent to which the prospect of gain would induce this purser to sow mustard-seed and small salad in wet blankets in the tops and quarter-galleries, and cherish laying hens in the coops, and carefully preserve the sweepings of the hold and the shakings of his bread-bags which in ordinary times would have been thrown overboard for riddance; and if the same personifications of benevolence should exhort each of the crew to get a nice little bag, and diligently collect his crumbs, and see what a nice little supper he would make once a week out of his savings; it would be plain that it was well as far as it went, but that all this was perfect noodleism if it was held forth as any effectual removal of the evil, and most of all if it was represented as what ought to be trusted to in future voyages, or supersede the real preventive, which would be to

bring the purser into port at the yard-arm *in terrorem* to future experimentalists. And if the case was extended so as to admit of the supposition that the population had a tendency to increase,—as may be done by substituting the tenants of a besieged town, in a leaguer of the duration fashionable in antiquity,—it would be equally plain that no mortal exertions in the way of labour could make provision for an increase of population under such circumstances, or prevent the certainty that if a lucky few could obtain enough to keep their offspring alive, a proportionate destruction of children or grown people through want must take place in some other part in consequence.

Here then is a triumphant proof of the precedency of agriculture! can anybody deny that commerce must be dependent upon food? It is all true. But is this all? And is this the only case? Suppose the case put, was of a Venice or a Tyre, a mud-bank or a rock in respect of the faculty of growing corn, but endowed with the power of procuring it with scarcely an assignable limit, by exchanging the results of manufacturing industry exercised on commodities of either domestic or foreign origin, joined, it may be, to the exercise of that particular kind of industry which consists in being carriers by sea for foreign nations. What now becomes of the precedency of agriculture? It is true that all corn must be got by *some* agriculture; but this was not the thing meant. When people talk of the precedency of agriculture, they mean the agriculture of the mud-bank at home. The mistake therefore is simply in talking of agriculture as if there was no corn to be had but from the cultivation of the mud-bank;—in stating what would be correct if there was none else procurable, and applying it to the case where this is not true at all, or where if it be true it is only through the interference of point-blank tyranny and undisguised wrong, operating in a particular direction as they would operate in many others if men were feeble and ignorant enough to give them leave.

In the next four Sections, there is something that desires further sifting, to remove a semblance of contradiction. If "the prime, the executive agent in Europe, for unlocking the capabilities of the soil," was commerce, how is it that it should not be "an *efficient cause?*" There is a deficiency somewhere; and the asserted "dependence of the latter upon the former" [p. 62], is the point to be suspected. It may be perfectly true that manufacturers cannot exist without food; but is it not equally true, that agriculturists cannot exist without manufactures? If there are varieties in manufactured goods, so there are in food; there are all the gradations from frumenty to pheasant. It is no more fair to assume that the manu-

facturer wants nothing but dry bread, than that the agriculturist wants only huckaback. The conclusion of which a prospect appears to be held out, is that in countries where the facilities for creating manufactured goods are greater than for creating food, the power of exchanging goods for foreign corn is the road to the increase of the public wealth and happiness; and *vice versâ*, where the facilities are greatest for producing corn, the power of exchanging it for manufactured goods. If England *may not* buy the corn of Poland, and Poland consequently *cannot* buy the manufactures of England,—then two countries are condemned to suffering, to please the tyrants of the soil in one. And in each country it is probable that an imaginary importance will be assigned to the produce artificially prohibited. In England, the man who produces corn will set up his claim to precedence. In Poland every boor can create corn; but where is the man that can create a yard of cloth? It is not difficult to see that in both cases the precedence is equally without foundation in anything but artificial restraints. If English artisans might produce corn out of their looms and their flatting-mills, the precedence claimed for the English agriculturist would fall to the ground. If Polish corn could be exchanged for English cloth, a clothier in Poland would equally decline in honours. The dispute between agriculture and manufactures will finally be settled by the discovery, that neither is before or greater than the other, except when the wickedness of man points a six-pounder against nature's bounty, and establishes a cordon of bayonets for the intercepting of her favours.

It is not easy to account for the neglect of these considerations displayed in the reasonings of this portion of the work, except by supposing that all scepticism on the subject is reserved till arriving at the part where a free trade in corn is immediately examined. This reservation, therefore, is necessarily to be extended to the "momentous distinction" between agriculture and commerce, in the form in which it at present stands, and to the deduction

'that the owners of the soil, in virtue of the property which belongs to them, have a natural superiority over all other classes of men, which by no device of politics or law can be taken away from them.' —*p.* 63.

Does this mean the Polish owners? Clearly not. With respect to the others, therefore, it cannot be correct, except on the supposition that the freedom of the trade in corn is finally proved impossible. Till this is proved, instead of "no device," every man has a device. There is a device as simple, as the child's invention of taking its fingers out of the fire. *Take away the power of injustice.* If highwaymen were uppermost, they

would have *pro tanto* "a natural superiority over all other classes of men;" but this would not prevent the discovery of a "device of politics or law" that should speedily be operative whenever honest men recovered the superiority. The deficiency which exists for the present, consists in confounding what landlords are while under an unjust state of law, with what they would be if the law was just. The whole of the arguments on this particular portion of the subject, proceed on the assumption that the land-owners and the law by which they happen at this moment to hold the power of prohibition, are identical and inseparable. The assumption is indeed carried to such a length, as in the eyes of those who are not convinced of the ultimate soundness of the explanation in reserve, to suggest the idea of men who should be seen sitting reasoning on the necessity of being burned in their houses alive, when apparently all they had to do was to open their back door and walk out. Yet this does not hinder the whole from being interspersed with most undeniable pickings of admirable reasoning and illustration, which will serve a powerful purpose in the hands of those who are able to make use of them. Take for example the description of the system of "expedients" in the concluding Section; always however reserving the assent to the conclusion that we are in a state of "nearness to the ultimate and immoveable barrier of our resources," and not rather that we are nearer to its entire removal than ever, and shall be nearer still by twenty-four hours tomorrow.

"Meanwhile, as the difficulties thicken, and the pressure becomes more severe, the expedients multiply. This is a teeming age for all sorts of crudities; and we have no doubt, that our very nearness to the ultimate and immoveable barrier of our resources, has made the necessity to be all the more intensely felt, and so given additional impulse to the speculations of philanthropists. Among others, the favourite device of employment has been acted on to a very great extent; though its inefficacy as a resource, one might think, should be abundantly obvious, on the simple axiom, that employment is creative of nothing but its own products. It was a far more rational and likely expedient centuries ago, in the earlier state of our agriculture, than it is at present; nor need we wonder, though in these days they should often have experienced a most convenient absorption of poverty and idleness in whole masses, simply by providing and dealing out work. There was room then for such an absorption, when the increasing products of the towns and villages could be met by the increasing products of a land, whose capabilities were yet so far from being fully overtaken. We accordingly meet with this expedient in the innumerable parliamentary acts of other days, for the suppression or the regulation of mendicity; and it was long the favourite scheme, both of parochial counsellors, and of individual philanthropists. The general rule of society is, that each man lives by his business; and the

first natural imagination is, that this conjunction between work and maintenance is just, in every instance where poverty and idleness are seen together, to be repeated over again. 'England is rife with this experiment throughout her teeming parishes; and quarrying, and road-making, and breaking stones, and digging in gravel pits, and the manifold branches of in-door labour in work-houses, have all been devised; that, if possible, by the products of their industry, their surplus people might earn for themselves their subsistence, or a part of their subsistence. The conception is prevalent all over, and has been endlessly diversified into various ingenuities, alike amiable and abortive. The platting of straw, and picking of hemp, and various sorts of millinery and hand-manufactures, have all been tried and found wanting. The effect is a general depression in the price of the prepared article, whatever it may be; or if the article be altogether new, the purchasers who are allured to it, are withdrawn from the purchase of other articles. On either supposition, a whole body of regular labourers are impoverished by the weight of these additional products upon the general market; and so utterly fruitless indeed has it turned out as a permanent resource, that, in despair, the expedient has been abandoned in many parishes, and the extra population are suffered to lead a kind of lazaroni life in idleness, and in the mischief and crime which are attendant upon idleness. The truth is, that if home colonization fail, employment in manufactures is far more likely to fail. By the former, a certain portion at least of sustenance, is drawn from the earth in return for labour—though inadequate to the full maintenance of the labourers. By the other, something is produced too, but it is not sustenance; but a commodity to be offered in return for sustenance; and which cannot earn that sustenance for additional labourers, save at the expense of all previous labourers. The home colonist, at work among the inferior soils, may perhaps extract from them three-fourths of his maintenance, and leave the remaining fourth a burden upon society. The workman in a charity manufacture, burdens society with the whole of his subsistence. The article he prepares becomes cheaper and more plentiful than before; but he himself becomes the instrument of a general distress, by inducing a dearness and a scarcity on that which is most essential to families.'—*p.* 71.

The learned author has laid the axe to the roots, of the silliness which looks for relief to anything but the freedom of the trade in corn.

The Chapter on the "Increase and Limit of Capital" is a powerful stirring of that particular pool, and interesting results may be expected from every portion of the agitation. The brief definition of Capital is, that it is wealth employed in the production of other wealth. Capital in short is a tool; and as there may be more tools than can be made use of by the men that can be fed on a given quantity of corn, so there may be more capital, which is only another word for the same thing. A few passages must be subjected to the reservation formerly described. The inquiry into the nature of "home colonization" is matter to

chew upon, both novel and important. The author has apparently directed the arrow to the right place, by his intimation [p. 487] that the pauper system of England is "home colonization in disguise;" from which it is an easy step to the suggestion, that home colonization is the pauper system in disguise. Both will be found to be the same face under different hoods. By home colonization a hundred men are set to work to raise the food of ninety; and the money which the public supplies to pay the difference, by its appearance in the market creates an increase in the price of corn, which raises the food of the ten men principally by a levy on the suppers of the class of people who are just above receiving eleemosynary support, and in some slight degree by the increased quantity of corn produced in consequence of the increase of price. Home colonization and the pauper system will be discovered to be identical in principle; but with this difference in the progress of the operations, that in the pauper system the whole food of the paupers is to be levied through the instrumentality of the increased price consequent on giving the paupers the means of appearing as competitors in the market, and in what is called home colonization only the difference between the food of the hundred men and of the ninety. Home colonization, therefore, is the pauper system, applied through the medium of a losing trade in raising corn.

The Chapter on the parallel between "Population and Capital," looks very like the conquest of a new territory to political mathematics. It was a valuable discovery that demonstrated the tendency the force of population has to fill up the gaps made in it by accident; the odds are that it will end in being demonstrated as clearly, that a process of the same kind takes place with capital. An inference from this is, that as the murder of a million or two of the human race does not leave a permanent gap in the numbers, but is repaired *quoad* number with vastly more pertinacity and celerity than was formerly dreamed of,—so the wrongful taking of a few millions of capital is repaired in a shorter period than would be expected, by a natural operation of a similar kind. There would seem to be truth in this. It is certain that the speculator would be wrong who should assume, that if all the men killed in the wars against liberty in America and France had been left unkilled, they and their natural posterity would have been existing at this hour in the shape of an addition to the numbers of the European population. And by a parallel mode of reasoning, if the thousands of millions expended on both sides in the same miserable contest had been left untaken, it does not follow that Europe would have been richer at this moment by that precise amount with interest on the same. There may be a *vis medi-*

catrix in the case of the robbery as well as of the murder; but without forming an apology either for the robbery or the murder. At the same time it would be wrong to omit noting the integrity of purpose with which the author has gone into a train of arguments, to prevent the possibility of his discovery being applied to the defence of the funding system [See on the "National Debt," Appendix, p. 490]. Doubts may be suggested on the absolute correctness of all these arguments; consisting principally in an apprehension, that when the public is described as "bereft of a given amount of enjoyment by means of higher prices" [p. 494], it is overlooked that if one part of the public was bereft of enjoyments by these higher prices, some other part had its enjoyments increased. But whether this be so or not, the impropriety of taking the money of the citizens by the funding system, seems as clearly established as that of taking their lives.

The Chapter on the "Possibility of Over-Production," or of a General Glut, may be described as establishing the possibility of such a phænomenon, *whenever there is a limit to the quantity of the first necessary of life,* which is food, and the population is such as to press against that limit; understanding always, that by limit is not meant a limit absolutely incapable of extension upon increased effort, but that everything is a limit, where the possibility of the increase of effort and of extension is itself visibly limited. The simple evidences of the fact, indeed, are in the shop of every trader in the country. Every trader would sell twice as many goods if he could; and why does he not? He would seldom have any difficulty in doubling the quantity of goods in his shop, if that would produce the effect; but he knows it would not, and therefore avoids. He knows that the goods in his shop, or all above what are necessary to serve as specimens and supply his daily demand, are so many things in mortmain, and for which he has paid in advance without prospect of return, till a customer shall come and release the imprisoned angels. The quantity of goods makeable, is quite a distinct thing from the quantity of goods saleable, if men are either ignorant of what prudence would dictate, or are tempted to run counter to it. If there is not a glut, therefore, it is because men take care there shall not be a glut; but the fact of its being necessary to take care, proves that a glut might exist. Every shop and warehouse within the territory might be loaded with a double stock; but the question of whether these increased stocks could be sold and continue to be sold, would depend on whether in consequence of their creation, an increased quantity of food could be obtained sufficient to satisfy the demands of those who are to be induced to labour

in the fabrication, and at such a price as would allow these stocks to be sold at such a rate as would induce men to purchase and consume them.

The two Chapters on "Foreign Trade" are extraordinary instances of an individual's arriving at most liberal and equitable conclusions, in spite of the pressure and occasional outbreak of preconceived opinions of an opposite tendency. No stronger internal evidence can be given of integrity; and the conclusions arrived at in this manner may be considered as doubly dangerous to the side of the argument which the author, apparently, would not desert if he could help it. It would be invidious to be precise in enumerating all the traits in which the original leaning is demonstrated; but some of them are remarkable. For example, the population of a country is divided [p. 219] into "*natural*" and "*excrescent*;" on the principle which would give the name of *natural* to that portion of a ship's crew which was fed on mustard and cresses grown about the decks, and *excrescent* to all the rest. The export manufacturers belonging to what is designated by the last of these appellations, are said [p. 229] to "labour in the service, and be subsisted by the wealth, of foreign customers;" as if the fact was not, that they laboured in the service of themselves, and were subsisted by the wealth which God gives them grace to command in their vocation. The zeal to eat hot rolls and household bread though made of foreign corn, is styled [p. 221] "our false and foolish ambition;" with various unsavoury comparisons, from scripture and elsewhere. But all this must absolutely be overlooked, for the honesty of the conclusions. It is impossible, however, not to suggest, that the same conclusions might have been come to by a shorter route. They present a mass of most upright casuistry, ending in establishing that men ought not to steal, and that there will be very little harm from hindering them. The source of the author's difficulties throughout, appears to be his conviction of a certain pre-eminence in diguity of corn. Now no man denies that corn is among the necessaries of life, and that it is that particular one of which we most urgently want more if we could get it. But this does not seem to take it out of the list of articles of commerce, or give it properties of its own distinct from all the rest. The great secret appears to be to have what we want;—to get the most of what we want that we can, and as the means to this end, to get it where and how we can get it cheapest, or in other words, easiest. The scripture was right in saying that man is not to live by bread alone; he lives by everything he wants, and he knows best what he wants to live by. If you desire to have bread at the top of your table, bread at the bottom, and bread for the

side dishes and dessert,—have it; but if you like other things better, as for instance Perigord pie, buy more Perigord pies and less bread. And it really does not seem to signify one pin to the general question, whether you, who shall be supposed to be a manufacturer of knives at Sheffield, give your knives for bread to an English land-owner, or preferring pie, transfer them directly or indirectly to Perigord in payment for the same. But it is urged that you must have been kept alive by corn during the process of making the knives. So you may have been by Epsom salts. It positively does not appear, that there is greater inherent importance in one fact than the other. If the corn, or the salts, were the produce of English industry, be grateful for them, unless you paid for them. But if you paid for them, then if the apothecary asks what would have become of your bowels if he had not sold you his salts, ask him what would have become of *his* if you had not been there to buy; and make precisely the same answer if the substance you have swallowed with advantage was corn. It does absolutely seem as if a bargain for corn, or for salts, cut equally both ways, and there was no more gratitude due to the owner of either for having consented to sell them to you in the way of his trade, than to you for buying them. Each party did it to serve himself; and each party served himself, and there is an end.

But these are inconsequential *maculæ*, and the important fact is, that a writer of great acuteness, coming to the consideration of the subject with manifestly no prejudices in favour of the side he finally takes but the contrary, did not discover a shadow of an argument for the justice of forcibly preventing men from eating foreign corn, however unworthy in his private opinion the practice may be; and could not, upon the maturest deliberation, come to any conclusion, but that the dangers to those who think themselves interested in the prohibition have been greatly exaggerated, and are he believes vastly less *than those of letting things go on as they are.* This is a most laudable conclusion; and better for having been come at in such a manner, than if it had been preluded by the bitterest attack upon the landed interest that ever issued from the press. There can be no doubt that their dangers have been overrated; the most forward of their opponents have said so, though it was not their business to be particularly diffuse upon that point. The land-owners,—like all men who have something they wish to preserve, but suspect they ought to lose,—try to keep up each other's spirits, by exaggerated descriptions of what they have at stake. Each does his best to frighten his neighbour into resolution; and reserves his better judgment for his private com-

fort in the event of failure. Abuses are always in one sense crying evils; they do squall most prodigiously *in articulo mortis.* Allowance therefore should be made upon this score; and they should never be believed on their own showing, for more than a tithe of what their outcry would suggest.

The lamentable circumstance for the supporters of the corn laws is, that little by little all their friends will be picked away from under them. The most feasible thing in the world, when information has taken a very few strides more, will be to convince the farmers and agricultural labourers, or an efficient portion of them, that they have at all events no urgent interest in the continuance of the public wrong. They gained for a season when the mischief was brought on, but their share in the general suffering has long since eaten up the benefits. By the converse of the case, it may be undeniable that the return to justice will be attended with some present exacerbation of their condition, but with the prospect of overpowering improvement at no very remote period. This is not the most favourable position imaginable to invite men to resort to; but it is a position which there is no reason to despair of inducing a great number of intelligent individuals to resort to in the end. There will be a desertion, or at least a slackness, first among the farmers and agricultural labourers, next among those descriptions of landlords who are obliged to provide for their children in the world themselves, and have no hopes of quartering them on the public purse; and the end will be, that the remaining class of landlords with their few adherents, will have the honour of going to the bottom in a minority together.

The author labours throughout under a species of dilemma, between the idea that cultivation receives an impulse from foreign trade, and that it does not. His solution appears to be, [p. 182] that it once received an impulse, but does not now. The conclusion is a disputable one. It is palpable that many a man makes exertions in cultivation, for the sake of having Port wine or claret every day or a certain number of days in the week at his table; and if the wine was not obtainable, it is reasonable to suppose his exertions might at all events be diminished. It may be urged that if there was no such thing as wine, some other object of desire would take its place. But if *all* objects of foreign produce were cut off, would not the range of objects of desire be at all events greatly reduced, and must not this produce a partial if not a total removal of the exertions? Would not the individual in fact be carried back to the situation in which it is allowed that the introduction of foreign trade produced a start; and if the introduction produced a start, must not the absence produce a retrograde movement towards the old point?

It does not seem conclusive to state, that the removal of one particular foreign comfort would produce no visible effect; the question is not of the effect of putting one bar to the cage, but a multitude. The thing to be strongly suspected is, that land is cultivated in proportion to the degree of satisfaction procured to the owner or cultivator in the way he likes best. And this constitutes an objection to the conclusion to which the author appears to come upon Irish absenteeism as distinguished from English. The question is, whether the Irish produce, consisting as it happens of articles of human food, is not produced because it can be sold in the over-sea market; and whether there is any more certainty that if this was put a stop to, the provisions would continue to be produced and be eaten by the poor of Ireland at home, than that if the export of sugar and rum was stopped from the West Indies, the present quantity would continue to be produced and be given in punch to the negroes,—or that a baker would improve the feeding of his family, by stopping the exit of the bread that is fabricated within his borders.

The Chapters on the "Effect of Taxes" repeat the phænomenon of those on Foreign Trade. The author is manifestly beset with all kinds of disputable opinions, such as an apprehension of "a misplaced antipathy to taxation" [p. 259], and a persuasion that "in virtue of a sweeping and blindfold retrenchment," "the monarchy is shorn of its splendour; the great officers of "the state stripped of their graceful and becoming dignity; the "system of public instruction stinted of its needful allowances; "the requisite agency for the business of government crippled "in all its departments; our gallant warriors made to pine in "sordid destitution; science, in the Gothic barbarity of our "times, unfostered and unrewarded; in a word, the glory and "substantial interests of the nation sacrificed." He believes we live under "a regime of hard and hunger-bitten economy, "[p. 261] before whose remorseless pruning hook, lie withering "and dissevered from their stem, the noblest interests of the "commonwealth; a vehement outrageous parsimony which, "under the guise of patriotism, so reigns and ravens over the "whole length and breadth of the land, and cares not though "both religion and philosophy should expire, if but some "wretched item of shred and of candle-end should be gained "by the sacrifice;" a conclusion which may be ascribed in a great degree to the misfortune of having been some weeks too early for the appearance of Mr. Effingham Wilson's "Extraordinary Black Book," a wonderful conductor of grief and silent carrier-off of apprehensions on the subject of complaint. This is manifestly no *novus homo* from the Political Unions; yet he

comes to the astonishing conclusions, that "it is quite the wis-
"dom of our statesmen, in this particular instance, to proceed
"in the current of the general feeling" [p. 299]; and, that though he is "far from the opinion, that *vox populi*, is *vox Dei*, "yet, on the present question, it so happens, that the demand "of the many, runs in the direction which is best suited, both "to their own interests and the interests of all." He is convinced that

'it were no small advantage if landlords were made to bear the whole burdens of the state ostensibly, as they do really; that the importance, the paramount importance, of landed wealth and of the landed interest, would stand forth, nakedly and without disguise, to the recognition of all men. So that it were well for them, if compelled, even though against their will, to pay all taxes. The men who hold in their hand the necessaries of life, have the obvious superiority over the men who but minister the superfluities or the comforts. They have the natural ascendancy; and we think it wholesome and befitting, that they should have the political ascendancy also. We hold it the most exceptionable feature in the modern scheme of representation, as being a violation of the rightful and natural order, that the agricultural interest is not sufficiently represented in parliament. We think, that, in partitioning the matter between the landed and the commercial, the supreme importance of the one, and the merely subordinate or subservient character of the other, have not been enough adverted to. But, perhaps, the very violence thus done to the natural propriety of things, may speed the manifestation of the truth upon this subject. The proprietors of the soil have been a vast deal too tardy in learning the lessons which relate both to their own and their country's well-being. It is better that the repeal of the corn laws, and a reformed system of finance, should both be forced upon them. They will maintain their ground notwithstanding. They may be overborne for a season; but their indestructible wealth will at length appear manifest to all men, as being that which constitutes the main strength and support of the nation. It will even make head against the inequalities of our representative system, and secure for them, in opposition to every device and every provision in the framework of our constituency, the ascendancy in parliament—an ascendancy which will the more readily be deferred to, when it becomes clear as day, that they indeed bear all the burdens of the commonwealth. The lords of the soil, we repeat, are, naturally and properly, the lords of the ascendant.'—*p.* 301.

There really does seem some reason to apprehend, that the Political Unions will be obliged to interfere on behalf of the landlords. They will at all events give their votes and interest towards the agricultural body being in an especial manner represented in parliament, if the landlords will give good security for agreeing to be "compelled, even though against their will, to pay all taxes." The objection to their political ascendancy

has always been, that they used it, like all other ascendancies, to oppress their neighbours. If they will agree to an ascendancy that shall be no ascendancy, the bargain shall be struck directly. But some care must positively be taken of the landlords. The doubt is, whether it be so absolutely and irrefragably true, that the landlords do always really bear the whole burdens of the state. If they do, it is a most proper provision of nature. But since, if they do, the community can lose nothing by the proposal,—the community will be content with the landlords paying the nominal portion of taxes which would befall them, under a state of things where every man should be allowed to sell the labour of his hands for what he likes best, and an equitable partition of the public expenses afterwards. But even if it should be strictly true, that nature has ruled and provided that all taxes shall in the end fall on the thing called rent, it does not appear why the land-owners should thereupon assume to themselves any pre-eminence over the rest of the community. In the case, for example, of a society which should proceed to take possession of a new-found territory, it does not clearly and luminously emerge, upon what principle it should be established, that the residuary owners of what nature leaves them out of the rents that are to be, are thereby to be seated on any particular bench of honour, above those who may attain to holding an equal fraction of the aggregate wealth through the instrumentality of any other agency. It shall be conceded fully, that the residue of the rent shall be considered a fair prize in the lottery of industry as much as in other cases; but it is not evident why it should be considered *more* than in other cases. There are some persons who have not a distinct vision even of the fact of the equality; it might be dangerous, therefore, to urge them with the claim for a superiority. And the claim urged is manifestly only the argument used to the lion in the fable. Allow the lions to be the statuaries for a season, and it shall soon be seen who is uppermost. Allow us to rob the landed interest for seventeen years as they have been allowed to rob *us*;—give us leave to prevent them by Act of Parliament from selling the produce of their estates in open market, and to tax them in order to enable us the manufacturers to purchase more corn with our products from abroad;—and we will demonstrate in the twinkling of an eye, the priority and natural ascendancy of manufactures, and the merely subordinate and subservient character of the landed interest. The whole argument is founded on the event of a race in wrong, and may be turned end for end by only supposing the other horse had won.

The Chapter on "Tithes" appears to accord in the main with

the representation, that the effect of the mode of collection by tithes "may be compared to the effect of a convulsion which at some period of remote antiquity should have sunk a certain part of the land of the country into the sea*." Such a circumstance would cause Britain to be at this moment a less Britain than would otherwise have been the case, by a proportionate part of her territory, population, and everything else; bu tit will not be contended that there would be at this moment any increase in the price of corn. And by the converse of the reasoning, if all this land should rise again out of the sea, the population would finally be increased, but the increased cheapness of corn would only be for a time. In fact the facility of obtaining food and the increase of population, are the two circumstances, of which one is always destined to eat up the other.

But there appears some danger of a fallacy on this subject, like that of Swift's servant when he omitted to clean his master's boots. "They would soon be dirty again," said John. "We should soon be hungry again," said his master, when he pushed past John's *diversoria nota* in retaliation. It does not follow, that because the effect of a given thing can be proved to be only temporary, it is therefore to be overlooked; the best dinner that ever was eaten is precisely in this predicament. The very intent and object of nature may be, that the thing or something like it should be repeated *toties quoties*. The most important point in all political mathematics at the present conjuncture of the world, is to establish and popularize the truth, that the comfort of the world depends on a continual chase after new markets for procuring corn, as it does after new dinners. The beef of today must form no excuse for going without the mutton of tomorrow; and the welfare of the concerned depends on an uninterrupted succession of similar phænomena. The gains to the labouring classes from the commutation of tithes might be only a fortnight's dinners; but the life of man is by a succession of such things, and why should not this count for part? If any man expects to go in the strength of that meat for ever, he is wrong; but does that make any reason why the mess should be rejected if it can be had?

The Chapter on "Productive and Unproductive Labour" may be considered as having established, what many persons have long suspected, the unprofitableness of the distinction conveyed under those terms. The nearest to an excuse that can be made for their application, is that they arose out of an indistinct notion of labour well and ill employed. But if this was what

* See Westminster Review for 1 April, 1832 (p. 85 of the present Volume). Article on *Improvement of Condition of the Clergy.*

was meant, it should have been said so. A soldier, for instance, should have been attacked as producing mischief when mischievously directed, and not as producing nothing. The whole of this Chapter is valuable to those who desire instructive reading, and in many parts has more "mirth" in it than can commonly be compressed into a subject of political economy.

The Chapter on the "Law of Primogeniture" presents an instance of a species of inaccuracy traceable in some of the preceding divisions, as for example those on Taxes and on Tithes,—which is that of confounding the evil which people *do* charge against a practice or an institution, with the evil which they do not. Thus in the case of Taxes, very few persons in the present day believe that the removal of taxation would cause a direct increase of aggregate employment for the working classes, any more than they believe that such an effect is to be produced by levying money by taxation to be expended in building useless palaces or in digging ditches and filling them up again; and for the same reason, namely that all that in any of these cases is added to employment in some quarter or direction, must be taken off in some other. But they say that the individuals taxed unnecessarily or for purposes in which they have no interest or concern, are robbed as they would be by taking the money from them on the high road; and this it is that they maintain to be an evil, and they must not be diverted from it by starting the other hare to hunt instead. So again in the case of Tithes, the thinking part of the public does not need to be told, that in one sense it may be indifferent to the working classes in the aggregate, whether certain large revenues are to be expended by one set of men or by some other; but this verity must not be impressed upon them to the obscuring of the considerations, that the mode of collecting these revenues has in it something peculiarly hostile to the well-being of all concerned, and that the continuation of these revenues altogether, after a decent regard for existing interests and expectations, is as completely subordinate to the opinion of the community expressed through its legislature on the adviseableness of the same, as is the continuation of the pay of a file of musqueteers. A stout resistance should always be made to the mixing up the attacked with the unattacked; and one of the best services that can be done to the militant community, is to point out to them with clearness what it is they are going to attack and what to let alone. In short there must be no shots thrown away; and he is no friend who invites to such an operation. On the law of Primogeniture, in the same manner, there is no necessity to insist upon the fact, that ten

thousand a-year in the hands of one son would only be a thousand a-year apiece in the hands of ten, and that this would not make the sum more than it was before. But in the first place there is the direct consequence, that the nine junior sons are injured by the rule; and in the next, there is the indirect consequence, of vastly greater importance to the public than the other, that the influence and power thus created in the hands of the elder brother, are employed to procure a maintenance for the younger brothers out of the pockets of the public. This is clearly the end and the organized plan of the system of primogeniture; the ten thousand a-year is to be concentrated in the hands of the eldest son, that it may act as a battering-ram for procuring a thousand a-year for each of the others or as much of it as may be found practicable, by entry into the public pantry and appropriation of the victual that is therein *.

The argument for the law of primogeniture that is founded on the greater facility of raising taxes on the larger properties, may be placed in the class of things considered doubtful. It appears to amount to this;—Cut off the thousand a-year from each of the younger sons altogether, and it will be easier to levy a thousand a-year from the man of ten thousand than it would be to levy ten sums of a hundred from ten men of a thousand a-year each. If the younger son had a thousand a-year, he would be wonderfully tenacious of the odd hundred, and it would indeed be something like cruelty to take a hundred pounds from a man who was only to have nine hundred left; therefore remedy the evil by giving him none at all. The case is particularly recommended to all the younger sons in the community; who, if they happen to be dissatisfied with the share that befalls them of the public plunder, will probably be long before they see the merit of the law on this point in its full brilliance. The whole of the further inferences seem to demand the same kind of scrutiny. It is exceedingly difficult to get taxes from the people at large. As a remedy therefore, take from them ten times the amount of the desired taxes, by causing it to accumulate in the hands of somebody else,—and

* This was never clearly developed with application to the case of Great Britain, till it was done in the remarkable article entitled DE LA CHARTE SELON L'ARISTOCRATIE in the *Constitutionnel* of Sept. 4, 1829. The original and a translation were inserted in the Westminster Review for 1 Oct. 1829 [p. 174 of Vol. I. of the present work], and were republished by the author of the "Political Register," which was no mean compliment in more respects than one. There would be nothing unreasonable in affirming, that this article in the *Constitutionnel* may be counted among the co-operating causes which produced the call for Reform in Great Britain, and as such presents an example of the reflected effect on the interests of one country, which may be produced by mingling in the politics of another.

you will find this other somebody wonderfully more willing to consent, to pay the tenth part and keep the other nine. It certainly deserves some examination, whether as regards the interest of the people at large, this is not making shoes by cutting them out of boots.

On the subject of "Emigration," it may be suspected to be questionable, whether [p. 387] "the country is in a distempered condition, which is in the state of a vessel constantly running over." Have not all vessels run over since Noah's? And is there not every appearance, that the process of nature hitherto, which is some earnest of the plan that is to come, has been to push forward population from the first occupied parts of the habitable globe into the others? If population had always remained "in a state somewhat short of fulness," we should have been living among the ruins of the ark; for nothing but want of room ever induced the existing tenantry to quit. The point for sensible men to aim at, is manifestly to have just so much emigration as shall be forced upon them after their own best exertions to prevent it; without allowing either Shem, Ham, or Japhet to hurry the process by the prohibition of obtaining food where it can be had. The suffering which nature has designed for us is calculable and tolerable, softened by a thousand circumstances of mitigation and dilution. An Act of Parliament is what crowds the evil intended for eternity, into the interval between the first and final reading of a Corn Bill.

But if on the one hand a country is not to be pronounced in an unhealthy state on evidence of the existence of emigration, so neither on the other hand is the necessity for emigration to be unnecessarily increased to please the landlords. The plot of these last, is manifestly to make the English people breed for exportation, like the negroes in some States in America. They cannot hinder the multiplying, and they are afraid to encounter the consequences of keeping all at home. They know the cage would burst, and the makers of the law that constitutes the boundary be called to a severe reckoning; and therefore they have hit upon the middle term, of trying to make the landlord-ridden people of England breed for transportation. Every man whom the existing state of law obliges to emigrate, is an innocent man robbed by law till he embraces transportation as the lesser evil. It has long been a toast of the oppressors, that "those who do not like the land may leave it;" and they have so shaped their policy, as to put their wish in the readiest way of execution.

The "Compulsory Provision for the Poor" has long been known to be inefficient as the means of diminishing, and consequently of relieving, poverty. But there is one new question

to determine, which is whether a long-sighted Providence has not tacked the poor-laws to the landlords' backs as the instrument of retributive justice. The landlords have made a law to prevent the manufacturers from selling their wares in the market; and the manufacturers will justly retaliate when they have the power, by imposing a prohibition of a corresponding nature on the landlords. But when the landlords made this law, they forgot that by a previous law they were saddled with the necessity of maintaining the poor they made. No prospect upon earth is so delightful, as seeing knavery and cruelty disappointed If by any combination of circumstances it were possible, that in the actual state of things the landlords could make any attempt to get rid of the poor-laws, it would justify a division of their property by the poor. The parish relief is the poor man's right and his honourable fee simple, because it is only in consequence of having been foully and cruelly robbed that he is reduced to the necessity of taking it. It is his compensation,—a miserable one, but all he has,—for having been plundered of the first of human rights, the right which a man has of disposing of the labour of his hands. It is to escape the poor-rates, that the oppressors are anxious to encourage emigration. It only remains to be seen whether the poor of this country are simple enough to give into the plot. If they are, a few years more of Sunday schools will put an end to it.

It is on this view of the subject, that the decision of the question of the introduction of poor-rates into Ireland seems to turn. Are the Irish landlords of such a description or not, that it would be useful to stipulate, that the poor they may make by misgovernment, they shall be obliged to keep? That poor-rates have no direct effect to diminish poverty, may be readily allowed; but have they not an indirect effect, by making the artificial creators of the public misery finally the sufferers by the consequences of their own acts?

On the Chapter on the "Education of the People," it is desired to be brief, and to displease nobody. The great objection to be urged against the premises on which it is founded, is that the attempt "to demonstrate the futility of every expedient, which a mere political economy can suggest for the permanent well-being of a community," partakes of the same weakness as an attempt to demonstrate the futility of a succession of good dinners. There is possibility that it has been overlooked, that though one expedient and one dinner may be ineffectual to permanent good, a succession may form a chain, of which very different things may be predicated; and still there may always be room enough for everything that can be done to improve the conduct and discretion of the people. The matter for regret is,

that the two great modes of improvement should not always agree to go on together,—the political economist to do what may be done for the diminution of temporal evils, and the religious philosopher to exert himself to teach mankind the best mode of supporting such as will be certain to remain.

WESTMINSTER REVIEW, 1 July, 1832.

ART. XIII.—1. *Elementary Propositions on the Currency. With Additions, showing their application to the present Times.* By Henry Drummond.—Fourth Edition. London; Ridgway. 1826. pp. 69.

2. *Facts relative to the Bank of England, explaining the Nature and Influence of the Bank Charter; with a View of the Causes and Consequences of the Suspension and Restoration of the use of Standard Coin.*—London; Westley, Effingham Wilson. pp. 84.

3. *A Legal Statement of the Real Position of the Government, with relation to the Bank of England.* By Samuel Wells, Esq., Barrister at Law, and Register to the Honourable the Corporation of the Bedford Level.—London; Effingham Wilson. 1832. pp. 52.

4. *Historical Sketch of the Bank of England: with an Examination of the Question as to the Prolongation of the Exclusive Privileges of that Establishment.*—London; Longman and Co. 1831. pp. 77.

IN most cases of dispute it happens that there is a right and a wrong; and that an individual who feels moved to endeavour to oppose the wrong, may have the advantage of seeing the standard of the right erected in some quarter, whither he may transport his adherence and his contributions. But in the present case it is to be feared, that there is as yet scarcely anything ostensibly and visibly in the field, except the clashing of two clamorous wrongs. When a portion of the public property is doomed to be sacrificed to what is technically termed a job, no plan can be better conceived for securing success, than the setting up *two* rival jobs to fight each other, and so puzzle and distract the attention of the public who are to "suffer." In the actual instance, there is the Bank of England job, and there is the Country Bankers' job. *Both are wrongs;* but it is too much to expect from the past circumstances of the country, that it should be able to see through the mystification of a combat between the two, or discern that it is in reality only a struggle between interests equally hostile to the community. And as there are certain probabilities on the face of things, which lead to the expectation that the community may be better able to understand and to direct its own interests at some coming time than now, a proportionate ardour is displayed to get a

lease of mischief settled in some way at the present, and "conserve" at least some ten years' profits of the evils. There is perhaps but little chance of hindering this; the wrong has us at a disadvantage; the community is too young in the habit of attending to its own affairs, and the wrong too old, to leave much hope of prevention for the present. But it is pleasant in such a case, to get hold of any number of men however small, and teach them to say, "*Now*, see, the hand goes down into our pockets; and now the fingers twine and grapple with our purse-strings; and now the purse comes slowly forth, like some reluctant eel extracted from his cave, and glads the spoiler with its glittering folds."

The groundwork of all knowledge of this nature, is for a man to convince himself thoroughly and entirely of the fact, that any nation in a tolerably advanced state of civilisation has the power of dispensing with the expense of a metallic currency, by the substitution of one of leather or paper or some equally cheap material, in the same manner as an individual can dispense with gold and silver drinking-vessels by the substitution of glass. Waive all questions of the ultimate policy of this; enter for the present into no inquiries touching the magnitude of the adventitious obstacles that may arise; but leave all these to be duly estimated to the last scruple in the proper place. Let it be admitted as for future establishment, that there may be danger of the glass inflicting wounds upon the mouths of the drinkers, that maid-servants may let it fall and footmen scratch it by the roughness of their purgation, that it may crack under the influence of heat and leave us disappointed of the expected tumbler of warm invigoration; let all these pains and perils be put by in a parenthesis, and attach yourself to the simple fact, that there is an initial possibility for a man to furnish his table with glass, *and put the price of the silver tankards of his ancestors into his own peculiar pocket.* So in the case of money, look round upon the evidence there is,—an evidence not made for the occasion, but furnished by the enemy in the course of his past operations upon the public property,—that a leather or a paper money, openly declared to be irrecoverable from the government that issues it except as it may be proffered in discharge of taxes, will nevertheless maintain a certain value in exchange, and that the magnitude of the value possessed by each particular scrap and portion, will be determined by that which is required to make the whole money in circulation possess the value of the quantity of gold or silver or convenient goods of any kind, which would be wanted in the existing state and condition of the society, to form an instrument or medium of exchange,—and consequently *any* numerical quantity of this

money (excepting quantities so small as to be incompetent to the general object through the want of subdivision, or in other words the absence of small change) will always be of the same total value (surrounding circumstances of all kinds supposed unaltered), any addition to the mass being absorbed by a proportionate depreciation in the value of each of the component parts in the pockets of the holders of the total currency, and any diminution counteracted by a proportionate rise. That this is true, has been exemplified by public experience; and for those who are desirous to see the *how*, the *when*, and the *where* of all these effects, painfully dissected and laid out as on the table of a demonstrator of anatomy, the thing has been done, and without pretence of refutation or denial, in the earliest Number of the present periodical work*, and disseminated in the cheapest form, with curious steering through the shoals and quicksands with which the robber-made laws of this country have surrounded the attempt to communicate anything useful at small expense, and specially and above all to bring knowledge to the level of the pockets of the poor.

This step being conceded, it is plain that an honest government has one of two things to do. Either it may determine, if it thinks it sees cause, to keep to the silver tankards, and use none but the most expensive medium; or it may substitute the cheaper instrument, applying the price of the old one to the use of the people who pay for it, and whose property it strictly is. But the government of this robber-ridden country has done neither; nor is there as yet any outward visible sign, that the existing administration is in a way of making any material alterations. The government neither kept to the expensive material, nor substituted the cheaper one and accounted for the difference to the owners; but it substituted the cheaper one, and set up the difference to be scrambled for, by anybody who would proffer the government corrupt assistance in return. It took the millions which were the value of the plate the people had paid for, and instead of accounting for them to the people, it went with them into the corruption-bazaar, and sold them for the means of inflicting further mischief on the community. The customers it found, were precisely the two sets of persons who are at this moment disputing as if the truth lay between them;—the thing called the Bank of England, and the country bankers. Each of these bought the privilege of supplying a portion of the glasses for the people's use, and pocketing the value of so many silver tankards in return. And what they paid in, was the coin that

* The Article on the *Instrument of Exchange* in the Westminster Review for 1 January, 1825. (See Appendix.) Published separately, Price 3*d*.

all public injuries are paid in,—corrupt support. Does anybody imagine that a grasping and money-taking government,—a government harassed and worried with a litter of aristocracy, to which the swinish multitude that besets an overburned sow is but a type of barrenness,—does anybody surmise that such a government gave millions away for love?

Supposing an honest government to have determined on issuing paper money, what it would have done would clearly have been, to have appointed an office, a *Bank* (for that would have been a natural name enough), which should have issued the paper to the extent the same honest government should have directed, by applying it to the discharge of the current expenses of the state, and at the same time appropriating corresponding sums out of the produce of the taxes to the relief and credit of the community;—for which the palpable and ready method, in the existing condition of this country and most other countries, would have been the buying up a portion of the public debt, and taking off taxes to the amount of the interest. Everybody can see that this would have been a fair operation, an honest operation, a creditable operation, and one that would bear the light; and by its approximation to this, must every other act be measured.

The extent to which such a Bank should be directed to issue paper, would clearly be, to the greatest extent at which a given particle of paper would buy in the market an assigned quantity of some commodity which experience has proved to be not liable to sudden fluctuations, and consequently to be a convenient standard of value. The experience of all ages has pointed to gold, as being the most convenient commodity for this purpose; the paper, therefore, should be issued to the extent at which a given particle (suppose the pound-note) would purchase in the market an assigned quantity (suppose, for brevity, a quarter of an ounce) of pure gold, or of gold in some assignable state of fineness. If it should be found at any time that a pound-note would buy *more* than a quarter of an ounce of gold (or the market price of gold fell below 4*l.* an ounce), it would be a sign that the paper might be increased; and if it should be found that the pound-note would buy *less* (or the market price of gold had risen above 4*l.* an ounce), it would be a proof that the paper was too much. In the first case, there would be manifestly no difficulty in issuing more, and applying the proceeds as before. In the second case (supposing it likely to occur where there should have been an honest intention not to bring it on by known over-issues), it would be just as easy to restore the proper price by buying up a portion of the paper in circulation. The readiest way to provide for such an opera-

tion, would be by applying the amount received for the paper currency, or some portion of it, to something of the nature of a sinking-fund; and then, if in spite of precautions the paper in circulation should be ever found too much, carrying a portion of the stock of this sinking-fund into the market again, and burning or destroying the paper received for it unless reserved for the chance of being wanted for future issue, would reduce the quantity in circulation. But throughout the whole of this, reservation may be made of the question, whether it is necessary to make provision for any such phœnomenon at all, *provided always security can be had against wilful over-issues.*

And here is made a principal point of resistance, with the friends of the present state of things. *Who can provide security against over-issues?* Answer, *Anybody, if he chuses.* Nobody can provide against over-issues, if the thing is to be wrapt up in mystery and concealment. Nobody can provide against over-issues, if the process is to be made a darkling job in the hands of men who are to be interested in doing wrong. Who can prevent his apprentice from robbing his till? Who can keep thieves out of his strong-box, or pigs out of his potatoe-garden? Who can hinder flies from flying down his throat? Anybody, if he chuses to shut his mouth. If he does not, he must be assumed to belong by nature and by instinct, to the genus fly-catcher. It is manifest he does it because he intends to do it. But it is absurd, because he does not stop it, to state that there is a physical difficulty in preventing the consummation. Direct by Act of Parliament that a statement of the notes in circulation shall be laid on the table of the House of Commons at the commencement of every session, and at any other time when the same shall be called for in the House in the ordinary manner; direct further that the money price of gold shall be published weekly by authority, as perhaps is already done in the Gazette or the Price Current; decree that there shall be no increase to the paper in circulation but by an Order in Council, upon evidence produced of the price of gold having been at least [sixpence] per ounce below the standard price, on the average of the weekly prices of at least twelve months previous*,—that the increase shall be only such as shall be collected from taking the proportion, of the

* Precise numbers in a case of this kind are always supposed to be for revision and after-examination. But the term of twelve months was fixed upon, because it seems exceedingly probable that there might be a natural fluctuation in the value of paper arising from the different demand for it at different seasons of the year. This it will perhaps be urged, would make it cheaper to pay debts at one season of the year than at another. And is this anything but what exists now? Has not every man his convenient season for paying money and the contrary?

difference below the standard price, to that average price*,—and that the proceeds shall be applied to the reduction of the public debt; inflict the penalties of forgery on all concerned, in the event of any issue not authenticated by Act of Parliament as directed; and leave all this open in all its parts to the perpetual visitation and examination of a House of Commons consisting of real delegates of the people. Do this, and see what chance there will be for the flies going down anybody's throat afterwards. If it is not done,—if the mouth is wilfully left open,—there will be no doubt of the flies going down in any quantity; but let no man say, it was for want of a way to hinder it.

If it is urged that all this is trouble;—everything is trouble. And in this case there are the people's millions at stake. Trouble enough can be taken for a grey hen; it would be thought no trouble to transport the man who should take one in certain ways unpleasing to the squirearchy, nor to string up any number of the lieges who should in other ways offend to the amount of some five shillings each. Divide, therefore, the people's millions by five shillings or a grey hen, and it will give some measure of the occasion there is for calling out trouble here.

What such a Bank would have to do, would be to keep the accounts always ready to be furnished to parliament; to supply new paper in the place of such as should be returned in a state not fit for re-issuing; and to do in fact what every man who ever kept a clerk or was one, can perfectly conceive. For this it is clear the agents must be paid; and only for this. The annual interest of the value of the metallic currency (suppose two millions a-year) would be what must be set to the credit of the public on one side, and the annual expense of this banking department on the other; and the difference would be the annual gain of the community. Can anybody suppose that such a department could not be conducted for 200,000*l.* a year? Nine-tenths, therefore, of the net interest, or a million and four-fifths of a million, might have been the annual saving to the community. What a rout is made about a million and four-fifths annually, if the question is of applying it to an honest purpose! What a trivial thing it passes for, when the question is of allowing it to slip down the gulph of public wrong!

The government *did* make a Bank, but it was nothing like

* For example, if the average price had fallen from 4*l.* to 3*l.* 19*s.* 6*d.*, the proportion would be that of 6*d.* to 3*l.* 19*s.* 6*d.*, or 1 to 159; or the paper actually in circulation should be increased by a 159th part. The same rule would hold good too, in the event of occasion to withdraw paper.

such a Bank as this. Ascertain what the one does, and what the other; settle what the one costs, and what the other; and the difference is job. Fancy that the Victualling Office, instead of being an office for the mere buying of pork and beef for the public service, and keeping the accounts of the receipts and issues, was a collection of pork-jobbers,—a society existing for the express purpose among others, of furnishing the government with the means of supporting and directing armies without being checked by the power of the Commons over the issue of supplies, and to which, in consequence, the government had actually got in debt to the amount of seventeen millions sterling. Such a Victualling Office would clearly be a nuisance, a thing to be attacked with all the means that God and nature may have placed in the people's power,—a thing the contrivers and inventors of which, if they had not already gone to what the scripture would term "their place," ought to be high up hung for a memorial for ever;—and the other is like unto it. It is an open, crying evil; an invention fitted and strung for the purpose of doing injury to the community, and of removing those checks on the rapine and tyranny of rulers, in which the people have been foolishly induced to put their trust. And this nuisance it is, which it is in plot and progress to continue upon us for a term of years, by means of the rump of an unreformed parliament, which has declared and avowed itself to be no representation of the people, but of the illegal influence of the Peers. The only resource is, that if the attempt should be made with a probability of carrying it through the forms, it should be attended by a protest on the part of the minority, that the question of reversal shall be among the first moved in a reformed parliament, and that the people will instruct their delegates to make such resistance upon other points, as shall overcome the advantage the enemy may possess in having got the mischief past the snap-lock of the Lords. The object is a very fair one,—that of hindering the community from being saddled with a ten years' nuisance by the trick of bringing the question before an unreformed parliament; and those who will the trick, will all the consequences.

The burden of the Bank. And next comes the burden of the country bankers. On which the first observation is, that the trade of a banker as at present practised, is divisible into two parts; one, the lending, discounting, and performing various other operations, *with his own money;* the other, the doing all this with paper of his own coining, which is doing it *with money he takes from other people.* Every note a private banker is allowed to issue, is so much of the price of the silver tankards the people have paid for, run off with by the private banker,

instead of being applied to the reduction of the people's debt or the diminution of the people's taxes. Where does anybody suppose the metallic currency came from, and who paid for it? Who paid for the metal that composed it; or was it by some art got for nothing? Who but those who pay for all, the toiling, sweating, people? It is true that when paper money is issued, the metal returns silently to the uses of bullion, and *this individual act* produces no new loss to the holder or to the people; the man who sells a coin as bullion, gets what serves his purpose in return. In the same way when a man's silver tankards are exchanged for glass, *this individual act* produces no new loss to the man. But does this form any reason why the value of the tankards he originally paid for should be taken by somebody else? The original price, is what he has a right to call for. Few people are so stupid as not to see through this; and there is not one man in a thousand that sees through the other. Just wait and see, whether the country bankers are not allowed by parliament to take the people's millions, as quietly as if it were an act of virtue. The plea put forward will be, that there must be a free trade in money. Why should there be a free trade *in the people's* money? Why is there not a free trade in the tar and pitch out of the people's dock-yards, or the pork and beef out of their Victualling Office? The term would be just as applicable. The issuing of private paper is not *a trade*, nor *industry*, in any sense but as those terms might be applied to a trade and industry which should consist in employing carts to wheel the public stores out of the dock-yards for private use. Free-trade may be a good thing; but this is free-booting. It labours under the original vice, that the whole subject matter of the trade that is to be, is in the first instance to be taken causeless from the owners. It is true that the owners are everybody; and therefore confidence is felt in the universally acknowledged difficulty of preventing public injury. The intended takers too are wide and influential classes; and what is worse is, they have the means of inducing numerous other classes to join with them, from the expectations of personal profit they hold out. They say to the insolvent manufacturers and rack-rented farmers, "Would it not be a snug thing, if I could take forty thousand pounds from the public by making paper money, *and lend you half of it?*" And the manufacturers and farmers of course jump at the bait, as they would jump at the proposal of having the same number of casks of pitch out of the dock-yards, or of pork out of the Victualling Office, if they could be as perfectly sure that neither hanging nor transportation was to be at the end of it. And nobody doubts either, that when the manufac-

turers and farmers get possession of this twenty thousand pounds, they will make some show with it. It would be very odd if they did not; and the show thus made, is to be called *national prosperity.* The theory in fact is this; "Take money from the public, and you will be astonished to see what wealth and greatness will grow out of it; you have no idea what nice things men will make, if you will only let them take money out of the public purse to pay for them." It is the secret of modern times, that taking money from one man to give to another, is the procreation of wealth. The whole explanation of the prosperity arising from the permission of private bank-notes, lies in this one artifice,—pointing to the expenditure of the money taken from somebody else, and calling it prosperity. It is as if certain individuals should be allowed to set up a toll on the highway and spend the proceeds on their private enterprises; and then somebody should point to the results and say, "See what prodigious wealth, arising out of that wonderful national discovery, of raising it by tolls on the highway." All the benefits, for instance, asserted to have arisen from the permission of small notes in Scotland, were nothing but allowing certain Scotchmen to take part of the public millions and divide them with their customers, and then puffing off the results as public gain. If a Scotch farmer or manufacturer has flourished by it, as why should he not,—some English one has been taxed into the poor-house to answer it.

This has all gone on the supposition, that the private banker merely substitutes his paper for what ought to be the people's paper, and that depreciation is prevented by his being obliged to pay in gold upon demand. But if, by any of the artifices of which specimens are not far to seek, he can issue without being directly or indirectly obliged to pay in gold,—then a new source is open to him, and he carries on what he calls *his trade*, with money levied out of the pockets of all the holders of the circulating medium in the country. Every note he issues under such circumstances, produces a depreciation which sinks the value of the whole increased medium in circulation, to the value of what there was before; and consequently all the pretended benefits to the borrowers or to trade, are specimens of the fallacy described, only with the change of the amount being taken from the public by the intervention of a fall in the value of the money in their pockets.

This is all reducible to the axiom, that what is taken from a crowd, is taken from nobody. That any set of men may get rich, by stripping one another. That many small quantities, are not equal to the large one which is their sum. That twelve pennies do not make a shilling; and that by depriving men of

the pennies and collecting them into shillings, the public gains the sum collected.

To the influence of the manufacturers and agriculturists who are anxious to borrow other people's money, may be added the influence of all the dishonest debtors in the country who are anxious to pay their debts in a depreciated currency. Suppose a man to have a bond debt for 100*l.*, and that by some contrivance he can compass a depreciation of the currency which shall make the same portion of his goods which will now sell for four pound-notes sell for five; and it becomes plain that he will discharge his debt with the goods that would have previously sold for 80*l.*, instead of what would have sold for 100*l.* There is no wonder that multitudes of men desire to do this. Their usual plea is, that the value of money was raised at the return to cash payments. But they take care to forget, that if it was raised, it was because it had first been fraudulently lowered; and that the correction of a fraud, is not fraud but justice. Their artifice is the same commemorated in rural annals, as practised by the man who pretended to divide his guineas with his wife. "There is one for me, and one for you;" *and one for me,* hitched in always the rustic plunderer, affecting to mistake the sound of *you* for the inchoation instead of the conclusion of a parallelism. This is precisely the argument of our bad debtors; that because there have been a pair of changes already, there ought to be a third. As far as concerns the question of paying the interest of the public debt, it has been established in black and white, and without anybody's attempting to dispute the items of the statement, that if the losses of the fund-holders by Pitt's fraudulent depreciation had been from time to time put into a banker's hands, and then put out to interest and the interest made principal as an honest man would do with the property of a ward,—and if this had been carried on till the year 1821 (which was when the currency was restored to its original value), and the fair interest or annual value of this amount is calculated, and compared with what the fund-holders have gained and are gaining annually now on such portions of the debt as were contracted when money was of a less value than at present;—in other words, if what the fund-holders have lost by being paid in money of a less value than the debts were contracted in, be compared with what they have gained by being paid in money of a greater value than the debts were contracted in;—*the first will be the greatest**. This is matter of

* See Mushet's Tables for every Year. (Baldwin and Co.) But for a further examination of the subject, suggesting an error in the calculations of Mr. Mushet, and stating the value of the difference (upwards of 422,000*l. per annum*), see Westminster Review for April 1833, Article "*Equitable Adjustment*" and

arithmetic, and nobody has ever attempted to destroy it by anything like arithmetic in turn. The outcry therefore that is raised on the ground of paying the fund-holders in a dear currency for debts contracted in a cheap, is altogether baseless in fact. It is like the attempt to charge a man with the whole debtor side of an account, to the exclusion of the circumstance that there is another and a heavier sum upon the credit. It is a simple, downright, *bonâ fide* mistatement and omission of one half the truth; a blunder, or error, or fallacy, which if it begins in innocence, terminates in all the effects of wilful wrong.

The fraudulent debtors, and the men who want to borrow money taken from other people, will manifestly always compose a large cry; and they make themselves heard accordingly. The statement here opposed to them, and which all who do not feel a common interest are invited to examine and insist upon their answering, is that all and every portion and fragment, of the asserted benefits arising to the public from that part of the operations of private bankers which is to consist of coining paper money, is a fallacy and a delusion, founded upon taking the advantages which undeniably may arise to any man from being allowed to take the money of other people, and representing them as public gain, by keeping back the fact that the phænomenon is founded on the creation of loss in some other quarter. Delusion of this kind is in truth the great secret of modern politics; nine-tenths of what politicans live by, consist in it. And the statement must not be weakened, by mixing up with it what is never stated. It is not at all denied, that the operations of private bankers, as separated from their coining paper money, may do good. But these operations must be carried on with their own money; not with other people's.

To allow the public money to be run away with, is a great evil; but this is not all. There is no person at man's estate, who has not witnessed intense and irremediable sufferings,—flagrant and intolerable injuries, such as if they had happened to himself would have utterly broken down his philosophy and thrown him hopeless on the shoals of an interminable despondency,—the savings of a life of industry dashed from the hands of age, and infancy turned out to meet the storm like young birds driven from their nest at the fancy of some lubbard schoolboy,—and all this because legislators had the ignorance or the malevolence, to allow the grand right of the people to an honest currency to be broken in upon. If a wretch under the impres-

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Postscript, contained in a subsequent part of the present Volume.—*Added in* 1839.

sion of want is led to coin a shilling, the world is up in arms to hang him, because he has broken, forsooth, the king's prerogative. If a rich man, desiring to be richer, coins 100,000*l.* in paper, the whole of which is taken out of the community's pockets to begin with,—he shall be held a benefactor to his country, and the parks and palaces he rears out of the possession of the money, be counted as so much gain to the dull community that fosters him. And if in addition to the use, he is found on inquiry to have lost or made away with the principal,—he shall be sighed over as a man unfortunate in trade,—lamentation shall be made upon the loss to the country-side, of such a great stirrer-up of industry and promoter of the wealth of all his neighbours,—and men with solemn faces shall lament, that they have only three banks left or as the case may be, from which they can now draw the breath of life and natural sustenance of commercial prosperity, consisting in the faculty of borrowing other men's money without their consent, through the intervention of the paper-monger.

Another point on which it is necessary to guard against being charged with what is not asserted, is that it never has been stated, that private bankers can produce *depreciation;* as long at least as directly or indirectly they can be made to pay in gold upon demand. This is not the charge. A man accused of adultery, might has well go about to prove that he had done no murder. The charge is not that they produce depreciation, but that they take the use of the money that ought to be the public's. The accusation is not that the man who has taken my money has produced depreciation with it, but that he has taken my money; that it was mine and not his, and without any question of whether he produced depreciation or not, was what he had no right to take at all. The fault was with the government that allowed it. It is to be hoped therefore a reformed government will prove a better keeper of the country bankers' consciences.

It has been intimated as a serious question,—though subordinate in comparison of some of the others,—whether there would be any absolute necessity or use, in making provision for calling-in superfluous paper at all, provided that positive security could be obtained for paper never being issued except in subordination to the proposed check. Nations on the whole do not go backwards, but forwards; a retrograde movement of the value of a currency of given volume, could therefore only be temporary. It may be urged that a bad harvest (for example) would cause gold to be in demand for the purpose of procuring corn from abroad, and that this would cause the paper price of gold to rise. To which the reply seems to be, *Why should it*

not? Where is the harm; and how is anything to be mended, by calling in the paper till it rises to the temporarily increased value of gold? If gold bullion rises in value because from accidental and temporary circumstances it happens to be in demand, why should the currency be meddled with, any more than if the thing that had risen in price had happened to be broad cloth? A man who, chanced to be wanting to gild a cupola, might suffer loss from such a rise; but nobody else would suffer. On comparing this with what would have happened if the currency had been gold, the advantage would all be on the side of the paper; for in the case of a gold currency, the demand for bullion would cause coins to be melted, and the value in exchange of what were left would rise, whence there would be a derangement of debts and credits, all debtors being obliged to pay too much. The result therefore of the proposed difficulty, is to establish a decided advantage on the side of paper.

Of the pamphlets on the subject, the most important from the details into which it enters, as well as from the reputation of the individual understood to be the author, is the last. It will be useful therefore to go into the objections urged against the establishment of a National Bank, by which is meant a "Bank established by Government, and responsible only to it," in the same manner, it is presumed, as a Victualling Office is an establishment for carrying on a public purpose of another kind.

'Those who argue in favour of the establishment of a National Bank, rely principally on the saving which they think it might be made to produce to the public. The interest of the capital of 14,686,000*l.* lent by the Bank of England to Government at 3 per cent., amounts to 440,000*l.* a year, there being besides, as already seen, a sum of about 260,000*l.* a year paid to the Bank for managing the public debt; and it is contended that were a National Bank established, both these sums, amounting together to 700,000*l.* a year, might be saved to the public. It is clear, however, that the stamp duty of about 80,000*l.* a year payable by the Bank of England, and the expense of managing a National Bank which might probably be estimated at 300,000*l.*, making together 380,000*l.*, must be deducted from the above sum of 780,000*l.*; and we believe we may safely add to the deductions to be made from the supposed gains, a further sum of 100,000*l.* a year for the expense to which the National Bank would be put in procuring supplies of bullion and coin, and in regulating her issues; so that the entire gain resulting from the supposed change could not amount, on the most exaggerated estimate, to above 220,000*l.*'—*Historical Sketch of the Bank of England.* p. 57.

There appear some odd items in this, on both sides the

question. Why is anybody to contend that the interest of the 14,686,000*l.* lent by the Bank of England to Government, is to make part of the sums that are to be saved to the public? Was it ever contemplated, that this interest was to cease to be paid upon a change of system? Why, on the other hand, is the 80,000*l.* of stamp duty payable by the Bank of England, to be placed to the side of sums to be lost upon a change? Does anybody suppose the Bank gave this for love, or without being in some way paid for it? The "further sum of 100,000*l.* a year for procuring supplies of bullion and coin," would also be non-existent, in a Bank which was to keep no store of either bullion or coin. On examining these items, all the boys turn out girls, and the girls boys. But there is more than this; which is, that the account omits and puts behind the door altogether, the great source of gain for the sake of which a national bank should be constructed, namely the saving of an amount equal to the annual interest of the cost of a gold currency. It is the interest of some forty millions sterling, (bating such parts of it as may be saved or secured by the imperfect and half-witted ways already in practice), which is the thing at stake. The rest are comparatively "betel between friends." If we are to have a gold currency, then no National Bank is wanted at all; and any pretence of one will be a job. If we are not to have a gold currency, then the interest of the cost of one, is what the government is bound to save.

'But the more we consider this subject, the more are we satisfied that the establishment of a National Bank would be a most unwise measure, and that instead of being productive of any advantage, it could not fail to occasion very great loss and inconvenience.'

'In the *first* place it may be observed, that it would be idle to expect from the agents of Government, however conscientious, the same watchful attention to the affairs of a National Bank, that is paid by the Directors of the Bank of England to that establishment. The heavy losses which the Bank has not unfrequently sustained, notwithstanding the vigilance of its officers, through the forgery and frauds committed upon it in its capacity of public banker, would, there is every reason to think, be still greater in the case of a National Bank. And were such really the case, the insecurity thence arising might be productive of much mischief.'—*Id.* p. 58.

The argument of this part of the objections, resembles one which should say, "It is the most difficult thing in the world to get a Victualling Office to be distinct and clear in its accounts. All sorts of frauds and forgeries are attempted upon it. The agents too can never be made to pay that 'watchful attention' to it that they ought. *Therefore mend the matter by making them pork-jobbers in addition.* Complicate the business in all

sorts of ways, and you will be astonished to see what simplicity of action will be the result. Give your agents all kinds of interests in addition to those of merely keeping you a common, vulgar Victualling Office. Make them butchers, salters, feeders, farmers, and landlords ;—give them the means of having a huge control over the pig-market, and of getting up and down the price of pork as it may suit them ;—do all this, and it will be reviving to behold what 'watchful attention' the sense of their own interests will make them give to your establishment." This is neither more nor less than the substance, of the argument *à complicando.*

'In the *second* place, the circumstance of the Directors of the Bank of England being principally merchants, largely engaged in commercial transactions, and intimately acquainted with the state of credit in London and the country, has enabled them to carry on the business of discounting to a considerable extent, and to make those immense advances in periods of discredit, which have sustained the commercial and financial interests of the country. But a National Bank could not be conducted in this way. It would be indispensable, in order to prevent, not the actual occurrence merely, but even the suspicion of partiality and abuse in the management of its affairs, that its functionaries should be interdicted from engaging, either directly or indirectly, in mercantile affairs. The business of discounting would have to be left entirely to private individuals; and the employment of the Directors of the National Bank would have to be strictly confined to the receipt and payment of all monies due to and by Government; and to the payment of their notes when presented. It is plain, however, that if the Directors of the National Bank were deprived of the power of discounting, they would have no means of contracting or enlarging their issues except by the purchase or sale of bullion, exchequer bills, and other government securities. But occasions might, and indeed it is perfectly certain would arise, when either from political or commercial causes, the exchange might be so much affected as to render it impossible to bring it to *par*, by selling or buying bullion and stock, without producing ruinous fluctuations in the price of the latter. We look upon the power of modifying the issue of paper, by enlarging or decreasing the sums advanced upon discount, as quite essential to those having to control the quantity of paper afloat in London; and as such a power could not be conceded to managers appointed by Government, without giving birth to every species of jobbing and abuse, we consider this very circumstance as conclusive against the scheme of erecting a National Bank.'—*Id.* p. 59.

That the Directors of the Bank should be "principally merchants, largely engaged in commercial transactions," is precisely the thing wanted to get rid of. Suppose the heads of the Victualling Office were "principally pork-merchants, largely engaged in commercial transactions." What is wanted is rather, that they should be men who did not know a spare-rib

from a brisket. That the Directors may have made "immense advances in periods of discredit" out of other people's money, may be true or not; but that they have thereby "sustained the commercial and financial interests of the country," is intended to be entirely denied. Every farthing they contrived to give to the favoured jobbers, was taken from somebody else. It was all a pure jugglery, dependent on robbing Peter to pay Paul. Paul might be kept out of one end of the List of Bankrupts; but Peter was pushed in at the other. The whole of the thing called credit, so far as it is founded on taking the money of one man to give it to another, is a crime and a nuisance. The artifice is, to confound it with the credit which one honest man may voluntarily give another. The things are as distinct, as stolen bread and paid for; but names are everything, and as bread is bread, a nation must be allowed half a century to find out the difference. Why are there to be "ruinous fluctuations in the price of stock"? If the proposed sinking-fund should have to sell, one tendency would be for the price to fall; but as the interest is to be paid in a currency whose value is to be increased, another tendency will be for the price to rise. And if in consequence of the issue of new paper the sinking-fund should have to buy, there would be two converse tendencies, which would act against each other still. Nature appears to have curiously contrived, that the fluctuations shall be null. That a National Bank should be "strictly confined to the receipt and payment of all monies due to and by Government," instead of being matter of grief, is just as it ought to be; as may be exemplified in a Victualling Office. "The business of discounting" is what *ought* "to be left entirely to private individuals;" and for a national bank to have any concern with it, is the old blunder of governments setting up shop-keeping like the king of Holland. "The power of modifying the issue of paper, by enlarging or decreasing the sums advanced upon discount," may be "quite essential to those having to control the quantity of paper afloat in London;" but what the public wants, is that there should be nobody to "control the quantity of paper afloat in London," other than through the operation of a reference to the price of gold, authenticated by Act of Parliament.

'In the *third* place, were a National Bank established, Government would be converted into a species of money scrivener, and would be directly implicated in the pecuniary affairs of individuals. Besides unfolding

—"the drift of hollow states hard to be spelled,"

it would have to fathom the mysteries of the Jews and jobbers of Capel Court. If the price of funded property were depressed in conse-

quence of sales made by the National Bank, those who suffered by such fall would ascribe the injury done them to the improper agency of Government, who would, in this way, be exposed to perpetual obloquy. Neither is it to be denied that the institution of a National Bank would afford great facilities for improper dealings in the funds, on the part of those connected with the Treasury and with its managers. Such persons being aware of the measures to be adopted by the Bank, might be tempted to purchase or sell stock in anticipation of purchases or sales by it; even though they did neither, they would stand an extreme chance of having such conduct imputed to them; and every one knows that such imputation would be highly injurious.' —*Id.* p. 60.

The object of a National Bank, is that Government should be *prevented* from being "a species of money scrivener," and that above all existing things, it should be neither directly nor indirectly "implicated in the pecuniary affairs of individuals." The way to hinder it from having "to fathom the mysteries of Jews and jobbers," is to allow it to have no mysteries of Jews and jobbers of its own. Suppose it was objected to the Government's having a Victualling Office, that besides affairs of state, it would have to unfold "the drift of hollow casks hard to be spell'd;"—would the way to hinder this, be to compose its Victualling Office of provision-dealers on their own account? The price of funded property will never be "depressed in consequence of sales made by the National Bank," if the National Bank never makes any sales at all, or none but under the proposed rule. And nobody "connected with the Treasury and with its managers" will fall into the snare of "improper dealings in the funds," if there is to be no meddling with the currency at all except under a known and proper rule.

'In the *fourth* place, a National Bank would be subservient at all times to the views of Government. The Bank of England has not, perhaps, on some occasions, turned a sufficiently deaf ear to the solicitations of the minister. But whatever may have been her failings in this respect, the cajolings and flirtations of the Treasury have had but little influence over her, compared to what they would have over the easy virtue of the Managers of a National Bank. Not one in ten of the Bank Directors owes any thing to Ministers, or is expecting to gain any thing by their favour. If they consent to their proposals, it is because they believe them to be advantageous to the Bank and the public, or because they are naturally disinclined to oppose any serious obstacles to the Government service. But the Managers of a National Bank, owing, as they must, directly or indirectly, their appointments to the Treasury, and being accountable to it only for their proceedings, what possible motive could they have to refuse any thing that ministers asked?'—*Id.* p. 63.

Why is not the Victualling Office found out in supplying the

tables of Ministers and their dependants with salt pork? Is it either through the impossibility of Ministers asking anything improper, or the dislike the Office would have to oblige a Minister? Or is it from the certainty that they *and* the Ministers, would bring such a storm about their heads as would not be paid for to them by all the salt pork in Christendom? Take away all obstacles to doing wrong;—make either a Bank or a Victualling Office that shall be "accountable only to the Treasury for their proceedings" and the Treasury be accountable to nobody;—do this or anything like it, and there will be no doubt of the attainment of any specified crop of evil. But the question was not proposed for the absence of all check, but for the presence of it. Let them have the Member for Middlesex to "flirt" with; let them have a reformed parliament to "cajole;" and then see what probability there is of our teeth being taken out of our heads, by a combination between the Treasury and the clerks of their Paper-Money Victualling-Office.

Things must be much worse in America than they are here, if the Americans could not make a Bank, and keep the Ministerial flies out of their molasses-tub if they were bent upon it. It is very likely that they could not be kept out of such a Bank as was proposed. It is very likely that the Bank proposed was purposely such a one as would not keep them out. There are strong interests there as here, against doing the people's business cheaply in their own shop. But that does not prove the evil necessary; except so far as it is necessary to go without, when other men can hinder.

The Americans know perfectly well, that they might as well say they could not hinder their cashiers from taking the money out of their Army Pay-Office,—or that they could not trust their frigates with top-gallant sails because they could have no security against setting them in a gale of wind,—as that they could not check their Government into checking the issue of paper money by the price of gold under a law of Congress. There is nothing mysterious in the principle; on the contrary the good sense of the public would go along with the rule, as in the case of the top-gallant sails, and there would always be sensible and honest men enough, to prevent the reckless action of those who might be the opposite. But where there are interests there are difficulties; and it is very hard to persuade any horse to tighten his own curb.

It is apprehended that the principle of an honest paper currency has as yet made very little progress in the world. When men hear of an inconvertible paper money, they confound an inconvertible paper under check with one that is under ou

check at all; the horse with his bridle on, with the horse at liberty to break their necks at his discretion;—and all manner of interests are at work to prevent their obtaining any clearing of their ideas. The success may be uncertain; but there are at all events strong inducements to try, whether the attempt to introduce the present mischief in the warming-pan of an unreformed parliament, cannot be effectually resisted.

(A Supplement to this Article is in the Westminster Review for 1 Oct. 1832; and contained in a subsequent part of the present Volume.)

WESTMINSTER REVIEW, 1 July, 1832.

ART. XV.—*Supplement to the Article on the "Silk and Glove Trades" in the Westminster Review for* 1 *April,* 1832.

SINCE the agitation of a subject brings forth truth, as the churning of milk bringeth forth butter,—and as it is always probable that the objections to a given proposition may arise out of the imperfect way in which it has been enunciated and supported,—advantage is taken of a number of comments which have been received upon the theory of *double incidence* in the Article of the preceding Number specified in the head, to try to extend the elucidation of the principle maintained.

The first objection suggested has been, that the mere transfer of an advantage cannot with propriety be called an *incidence;* and that in the Article alluded to, nothing more is made out than one incidence and a transfer.

The answer to this appears to be, that it is at most only a question of nomenclature. In a transfer of any kind, there must be two sides,—an *abstraction from* somebody, and a *giving to* somebody else;—and the word incidence was chosen, precisely because it appeared to include the first of these meanings. It was not *limited* to this meaning; because it was intended equally to express the occurrence of a loss where there should be no corresponding gain to anybody else. To take the simplest case (for which obligation is acknowledged to a commentator), if a shilling is dropped on the road by one individual and picked up by another, there is an *incidence* upon the man who drops, and an effect of a contrary kind (for which a distinct term does not so readily present itself) upon the man who finds. But if instead of being dropped on the road the shilling was dropped into the sea, there would still be an incidence on the man who dropped, though there would be no effect of a contrary kind on somebody that found. *Incidence* therefore expresses the occurrence of a removal, of an abstraction, of a privation, no matter in what manner, or with what other circumstances attended or

not attended; in short, the infliction of the negative sign in algebra. And there is no novelty in this; it is nothing but what is accordant with the ordinary employment of the term. If men talk of a tax taken, they ask on whom is the *incidence*. Since there is here no question of the tax being more than taken once and paid once, according to the nomenclature demanded by the objection there ought to be no incidence at all. But *incidence* does not mean what is left on the negative side after deducting what may chance to be upon the other; it means that which is on the negative side to begin with.

And the reason for employing this term is, that it, or some other to express the same meaning, is essential to the proof in hand. The proposition to be proved true or false is, that in a forced trade there are two *losings* and only one *receiving;* and it is for the sake of arriving at this, that the two losings are called *incidences*. There is no denial that the settlement of the account (supposing the losings and receivings to be each severally of the same amount) leaves a balance of *one;* but it is not this balance that is named an incidence. If 5*l*. is taken from A and given to B, and moreover 5*l*. taken from C and given to nobody at all, there is no denial that the balance of the aggregate account is 5*l*. *minus;* but this does not prevent there being an incidence on A and another on C, of 5*l*. each. On the contrary it is precisely because there *are* two incidences and only one gain (or whatever else it may be chosen to call it), that the balance is 5*l*. *minus* in the end.

The next objection commences on the expression in which "the loss of the brandy-and-water" to the glove-merchant is represented as balanced by "the benefit to his trade." There may be a portion of obscurity attaching to the word "loss." As intimated more than once already, there is difficulty in finding familiar terms to express the addition or subtraction of the quantities concerned, without being liable to misapprehension. *Loss*, to the idea of simple subtraction joins that of violence or injustice; and *gain*, though perhaps in an inferior degree, does something of an opposite kind in respect of simple addition. It was precisely to parry this difficulty in one instance, that the term incidence was introduced. By "the loss of the brandy-and-water" to the glove-merchant, was merely meant that if he applies the shilling to the benefit of his trade, he at the same time ceases or fails to get the brandy-and-water. It is the simple removal of the brandy-and-water from the list of his enjoyments. And on the other hand, it was stated, there is a "benefit to his trade" to an equal amount; which must keep the total balance of the account exactly as it was before. The benefit which before went down his own throat, is shifted

to a benefit to his trade and those concerned in it, in the shape of new wages or profits; and consequently, (the argument ran), if there were two incidences and one benefit before, there must be the same number still.

But the objection proceeds to state, that in the matter in hand there is really no question about the loss of the brandy-and-water. The glove-merchant, who is supposed to rob, can, not have the brandy-and-water and the benefit to his trade too. He can only have one; and if he takes the benefit to his trade, the only question (it is stated) is, whether the gain to the glove-maker balances the loss to the person robbed. It can hardly be maintained (the objection proceeds to say) that in regard to the interests of the society, a shilling spent in brandy-and-water is more advantageous than a shilling spent in employing more journeymen glove-makers. In reality however (it continues) the illustration is not a correct one, as it leaves the main point entirely out of consideration, namely, the raising unnecessarily the price of gloves.

Now there was never any attempt to maintain that a shilling spent in brandy-and-water is more advantageous than a shilling spent in employing journeymen glove-makers; on the contrary they were brought forward as things homogeneous and equivalent, and the argument rested on establishing them to be so. The objection appears founded, on not distinguishing the argument used in the two simple cases (of the highwayman and the forcible trader), from the argument in the complex question brought forward as the difficulty raised by an opponent; in which last the object was to reconcile the two cases, and show how and where it was, that the second incidence was formed when the supposed robber applied the plunder to his trade.

In every separate case there are always three quantities, two negative and one positive; and of the two negative, the reasoner is at liberty to take which he pleases and consider it as balancing the positive; and then (assuming that the three quantities are equal) there stands out the remaining negative quantity as the balance on the *minus* side. To resort, for instance, to the case of the glove-maker who sells for three shillings what might be bought from France for two. There is a gain to English glove-makers and their connexions, flowing down in the shape of an augmentation of wages or of profits in various degrees to the tanner, the butcher, the farmer, and the landlord, and exactly to the amount of a shilling in the whole;—this is the positive quantity. On the other side, there is a manifest loss of a shilling to the English wearer of gloves, who is made to pay three shillings instead of two;—this is *one* of the negative quantities.

And besides this, there is a loss to the English tradesmen with whom the shilling *would have been* laid out by the wearer of gloves if it had not been demanded for his gloves;—being the abstraction, in fact, of what would have flowed down in the shape of an augmentation of wages or of profits in various degrees to all the dealers concerned in the fabrication or production of the goods concerned, to exactly the amount of a shilling in the whole;—and this makes the *second* negative quantity. Of these two negative quantities, anybody is at liberty to take which he likes, and consider it as set off against the shilling gained to the English glove-makers; but whichever of them he takes, the other remains behind, and makes a loss of a shilling to England on the general balance. At the same time the neatest, or, as sailors would say, the most *ship-shape* way, is, to consider the advantage to the glove-makers as balanced by the disadvantage to the dealers thrown out of custom by the forced application of the shilling; and for this reason,—that the quantities (as intimated by the use of the word on a previous occasion) are what may be called homogeneous, and will therefore be compared together with an increased perception of the accuracy with which they balance each other. For each consists of the sum total of a shilling, diffused and branched out to an almost infinite extent, in the shape of increased wages or profits, in one instance among the exercisers of one set of English trades and callings, and in the other instance among the exercisers of another set. Any difficulty there may be in actually tracing the subdivision of the shilling, is therefore common to both, and leaves no doubt upon the fact, that the shilling's worth of advantage in one instance is balanced by the shilling's worth of disadvantage in the other. But if anybody insists on taking the thing in the other way, he is welcome; though it is not so clear.

The fallacy, both of those who go wrong by design and those who have not sufficiently kneaded and worked the subject, consists in always leaving out of sight one of the two negative quantities. The fraudulent trader for the most part says, "It is true the consumer loses a shilling; but then the glove-makers gain one;—think only what a benefit to trade!" *His* fraud is in throwing out of sight the fact, that besides all this, there is another set of traders somewhere that is losing to the same amount as the consumer over again. And on the other hand is sometimes met the altered form of mistake, which consists in pleading that a gain to a glove-maker must at all events be as good for society as a gain to any other kind of trader the money could be spent on,—and leaving out of sight, that if *these* two quantities are assumed to balance, the *loss to the consumer* stands out without compensation in the aggregate.

It is hard to demand of a proposition, that there shall be no possibility of putting it in a case that shall be complex. Simplicity is a blessing; but where nature has made cases of complexity, they must be dealt with accordingly. It is very easy to make cases, where there shall be a good deal of perplexity attending the tracing of the *two* incidences and *one* gain: but the important fact is, that they always *can* be traced. Sometimes, as in the proposed instance of the glove-maker who should take the shilling on the highway, the easiest method is by observing, that wherever any supposed circumstance makes a change of any kind to some one party, it makes a change of a contrary kind to some other; and consequently the aggregate result,—the fact of there being finally two incidences and only one gain,—remains unaltered. This mode of reasoning is what is constantly employed in the solution of an algebraic equation; and may consequently be trusted here. But in operations of this kind also, the operator may sometimes take his choice which of several things he will consider as balancing another; and care must be taken that confusion does not arise from considering the different processes arising from different choices in this matter, as contradictory.

A commentator to whom obligation has already been acknowledged, is severe upon the word "gain." There is no doubt of its liability to misinterpretation; but the difficulty is to get any that is not. There appears no present remedy, but endeavouring to clear the way by explanation of the intended meaning. It is undeniable also, that there was an obscurity about what was meant by the glove-maker who should take a shilling on the highway, "applying it to the benefit of his trade," and how it was to be imagined to be effected. The most intelligible way of imagining it to take place, is by supposing the robber to add the shilling to two more, and then buy a pair of gloves for his own wear with the money, either at his own shop or that of one of his fellow prohibitionists.

An evening paper * says, that

'If the shilling is "not lost twice over upon the total average," it is not lost twice over at all.'

This is only a misunderstanding arising out of different meanings of the word loss. By the same rule it might be said, when a shilling is gained once and lost once, that "if it is not lost once upon the total average, it is not lost at all."

'The consumer of monopoly-priced gloves, or silk stockings, loses a shilling. That shilling, the glover or silk-weaver gains.'

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* True Sun, 20 April, 1832.

'The tradesman, to whom the consumer of the monopoly-priced gloves or stockings would have transferred the shilling in question, loses, in all probability, custom to that extent—but to the same extent, precisely, some other tradesman gains an increase of custom.'

He does; but this is the man that has just been reckoned before, namely, the glover or silk-weaver. The glover or silk-weaver is reckoned twice over. Count him only once, and the loss of custom to "the tradesman to whom the consumer of the monopoly-priced gloves or stockings would have transferred the shilling," stands out an uncompensated loss.

"The payer of the money gets no linen coats," it is true—but, by the supposition, he gets something else—though not, of course, full value for his money. It is in the fact of the payers not getting full value—in the fact that there is an actual loss to the community—that the grievance lies:—not, assuredly, in the circumstance of his "getting no linen coats."

The objector has made the mistake of supposing it was the *three* shillings that were spoken of as cut off from the custom of the woollen-draper, when it was the *one*. The proposition as it stood, was the same as his own.

It has been explained before, that by designating

'the supposed thief's abstinence from brandy and water, which would have been paid for with stolen money, a *loss* to the thief—'

was only meant that there was a removal from him of the enjoyment of the brandy-and-water.

'The case would, we apprehend, stand thus——'

'One man is robbed on the high-way of a shilling. His loss is the robber's gain.'

'A tavern-keeper, to whom the robbed man would have handed over the shilling in question, loses custom to that extent: while a certain branch of manufacturing industry, in which the Reviewer's robber is presumed to be engaged, gains, exactly what the tavern-keeper loses.'

The tavern-keeper did not represent the dealer with whom the money would have been laid out by the robbed. Which might be a fruitful source of confusion.

But passing this, and taking the case as it is given;—The "robber's gain" and the "gain to the branch of manufacturing industry in which he is presumed to be engaged," are not two things, but one thing. This thing, therefore, cannot balance both the loss to the man robbed, and the loss to the trader (here called a tavern-keeper) with whom the money would have been expended if the robbed man had kept it. The fact is, the robber's gain (as distinct from the advantage to his trade) is nothing at all, if he is forced to swallow his own physic,—

if he is obliged to add the shilling to two more, and buy a pair of gloves for his own wear for three shillings which he might have had for two. He is a man despoiled of a shilling as much as anybody else would be. He may be considered as robbed in turn; and what he is robbed of he does not gain. The shilling thus applied to his trade does not go to *him;* except in the small portion that constitutes his particular profit. It is divided with the tanner, the butcher, the farmer, and the landlord. He is plundered of it by the corporation of people interested in the forced glove-trade like any other man; and if he saves the five per cent. which is his profit, it is only by the accident of his being one of the corporation himself. And even this fraction has already been counted once as being included in the "gain to the branch of manufacturing industry" set off against the custom of the trader with whom the man robbed on the road would have spent his money. The whole puzzle arises from counting the same things twice.

There is no denying, that the pursuit of all the imaginary cases into which the question can be pushed, is very complex and difficult. At the same time it is important to prove, that they *can* be pursued. The simple practical case is much the easiest; but the more the subject is agitated in all directions, the more the truth will stick.

It is scarcely necessary to say that these various comments have been received with much gratitude; nor must it be held impertinent to add, that the result has been a great increase of confidence in the ultimate accuracy of the principle laid down. As far as has yet been seen, it certainly holds water. The prospects held out are immense. Let it once be fully established, and perfectly drilled into the minds and souls of men, that all that is gained by anybody in consequence of commercial restrictions, is lost by the consumer, and over again by some traders with whom the money would otherwise have been expended,—let this but become a piece of household science, like the fact that three groats make a shilling,—let the grumbling consumer be once backed by the growling trader, and let them come to the knowledge that their interest is not a single interest opposed to the monopolist, but two against one,—and how long will the Chinese monopoly endure,—how long the East-Indian,—how long the throwing into the sea of a per-centage upon everything that is eaten, or drunk, or seen, or worn, that sounds on harp or viol, or gratifies the sense with its perfume,—how long the overwhelming Corn Laws,—how long the un-human poll-tax for paying for the flogging of women in the West Indies? The question is one that Napoleon would have called "*grande.*" If a periodi-

cal work should never assist in establishing any principle but this, it would be success enough for honest men, and memory that might satisfy all modest appetite for fame.

WESTMINSTER REVIEW, 1 July, 1832.

ART. XVI.—1. *The Extraordinary Black Book: An Exposition of Abuses in Church and State, Courts of Law, Representation, Municipal and Corporate Bodies; with a View of the House of Commons, past, present, and to come.* A New Edition, greatly enlarged, and corrected to the present time. By the Original Editor.—London: Effingham Wilson. 1832. 8vo. pp. 683.

2. *The Rights of Nations: A Treatise on Representative Government, Despotism, and Reform.* By the Author of "The Reformer's Catechism" and "The People's Charter."—London: J. Brooks. 1832. 12mo. pp. 454.

3. *Parliamentary Candidate's proposed Declaration of Principles: or any, A Test proposed for Parliamentary Candidates.*—London. Published at the Office of the Westminster Review, 5, Wellington Street, Strand; and sold by the Agents of the Westminster Review in all parts of the Kingdom. 1831. pp. 18.

ONE of the touchstones of a good commander, is always to move forward after a success. A driveller *dawdles*, and does not know what to do next; and so the precious time passes, and the enemy has time to set himself upon his legs again. In fact, beat any set of men, and give them three weeks without following up, and they will be as ready to try to beat you again as ever they were. It is in the nature of human affairs, that in all cases of recent contest, each party must either go forward or backward; a state of rest may be arrived at by slow degrees, but it is not a thing to be had by wishing for, nor by any man's running his head under the bed-clothes and fancying it is peace.

The English people and the honest part of the aristocracy, have just beaten the dishonest part of the latter *à plate couture*; which means that the opponent has been fairly forced out of the field. It is true that it has been done without fighting; but then there were none to fight withal. It would have been useless to recal this fact, if the bad portion of the aristocracy and their organs had not been the first to talk of military array; but as it is, it is one of the data for estimating their position. Men who would have fought and could not,—who were restrained from shedding blood by no motive of humanity or love of country, but who, on the contrary, chuckled over the idea of settling the manufacturing towns "in blood,"—such men, if properly looked to, are not dangerous after a great defeat such

as they have just met with. Only they must not be played the fool with; and decent care must be taken, being down, to keep them down. They must not be invited to resurrection by simplicity; no man scotches a viper and then says, "Go your way, till I meet you another time." The object is to act wisely and resolutely *now*.

The first element for settling the people's position and their duty, is to see clearly by whom the contest has been won. It has been won by the combination of two great classes,—the representatives of the aristocracy that made the Revolution of 1688 and their retainers,—and the masses of intelligent individuals in the working and middle ranks, that have grown up since the intermission of war in 1815. There is no need to distinguish them by symbols x and y, though it could be done almost as briefly; for titles, like comparisons, are sometimes odious. There was a good deal of distrust on both sides, before these two classes could be made to draw together; but at last, draw they did, in spite of all the efforts of open and hidden enemies, and the result has been to demonstrate, that as long as they *will* draw together, the field is before them. They have no enemy so long as they can combine; though armed men would rise out of the ground to demolish both, the moment any symptom was given of separation. It is the common question, of whether parties having great interests in union, can make such smaller sacrifices as shall continue their co-operation; or whether they will lose the ninety per cent, by quarrelling and separating for the ten. The family receipt on these occasions is, that a good deal must be given up on both sides; and what is sense for a family, is sense for a parish or a nation.

The first inference therefore upon view is, that the two parties,—the honest aristocracy and the intelligent people,—must hold together at all hazards. And the next is, that to accomplish this, they must each yield something to the other, and rather be inclined to strain compliments upon each other, than to be picked and precise as to what shall be mutually demanded. The aristocratic side have had a cheap bargain, in being carried on the shoulders of the people to an elevation that gives them the prospect of such real greatness, fame, and useful power, as have never been surpassed in the world's history. They would not be ungrateful, they would be fools and incapables too low to be accountable for their actions, if they were to think of quarrelling with the steed that carries them. And the people, on the other hand, have done through the junction of the aristocracy, what they would not have done without; and *will* do, through the continuance of the alliance, what they could not do, or at all events could not do so easily and so well. The

union is a good union, if the parties can only be made to hold one another in the mutual respect that shall continue it. The point to be settled therefore is, what each ought to give up to the other. And here the people have already agreed to give up,—not only all questions of major changes in the form of government, though many of them had imbibed from history and experience strong leanings in that direction,—but also any attempt to carry further the alterations in the subordinate forms and channels of legislation, except so far as the necessity shall be evinced by future experience. There is no disguise or concealment, of what it is the people have fixed their minds upon. They have set their hearts upon being as well governed as their cousins in the United States;—and they mean to have it. They have no notion why New York should be governed well, and Old York ill; and they have agreed to try whether the present change will produce the effect desired, and if not, they will try another. This is their bargain; and what they have bargained, they will stand to. But then this is of itself an enormous *quid,* and implies a *pro quo* of proportionate dimensions. The fear is not that the upright aristocracy should give too much, but that after exerting all their talents they should give too little. They stand in the situation of officers, who by the firmness and vigour of the array of common men behind them, have just been carried to the pinnacle of present success against a stubborn enemy, who is known to be rallying again behind the next ridge, to try his fortune in at all events cutting off as much as possible of the fruits of victory. In such circumstances, if any man were to ask what would be, not the wisest, but the maddest thing such officers could do,—if he were to be curious in ascertaining what imaginable proceeding would lead most directly to the conclusion that it had pleased God to visit them with a privation of the degree of reason which makes men competent to the actions of common life,—it would be if it should from any source be suggested to their minds, to hint about disbanding the array that had led to victory. If anybody chuses to suppose such a case,—which is perhaps hardly civil,—the result would clearly be, that the epaulettes who so conducted themselves, would be invited to go over to the enemy's side to prevent confusion, and somebody else would quietly step forward and take their places. There would be a general cry through the ranks, that we had not come here for the pleasure of marching up a given hill, or looking down upon a range of country from a certain point, but of attaining known public objects, and till these were practically and substantially secured, the man was a traitor who should so much as whisper to pile arms. There

are degrees of folly no man thinks of; and this is one of them. But if by some gambol of imagination the case is supposed to occur, the answer that would fly from rank to rank would necessarily be, "Neither for you nor any man! We stand here "in the plenitude of conscious and experimented strength: we "should be sorry to suppose that either A or B should think of "making themselves our enemies, but if A and B are given "over to an insane mind, A and B must only try."

At the same time it is evident, that no set of men want to stand in heavy marching order for ever, and that they will be as willing as anybody else to turn into quiet quarters, the moment the people on the staff will bring things into a reasonable state for doing so. What, then, is that reasonable state?

The first essential towards it, is manifestly that our aristocracy or men of epaulettes shall have removed from us all those marks and badges of servitude, the imposition of which *they themselves protested against when they were a minority.* This is a criterion which anybody must be a barefaced rogue and deceiver to object to. The various chains and gags and collars, inflicted since 1791 in the shape of restrictions or impediments on the press, on the right of popular meeting and communication on political subjects, the Six Acts, and the Foreign Enlistment Act, must come down and be trampled under foot before any man with the spirit of a leader or the honesty of a private sentinel, can counsel, or hear of any counsel of abating the least of the array that has won the victory. We have won it by means of the array; and we are not so simple as to be told, that because we have won it, the reasonable inference is that we should submit ourselves tied and bound to the enemy. If they love us, they will not dream of asking us any such thing; for if they did, they know the answer. We all of us are well aware, that the frame and constitution, the mechanism and carefully contrived organization of our government is, that substantial and efficacious portions of it shall be born and bred, and christened and married and buried, under the full influence and operation of everything which an ingenious theorist could point out as hostile to the interests of us the people, and that these constitute the antagonist powers, by the action of which the vessel of the public happiness is to be kept with the keel downwards and the masts uppermost. We know that it is ruled and regulated,—not as any temporary phænomenon, but as what is to be systematically repeated and renewed from generation to generation,—that one virtually if not ostensibly operative portion of the government, is to be an offset from a foreign power;—that the absolute powers of the Continent are always to have a representative and a vote, and all the final results of

government in England are to be dashed and tempered by the introduction of this element;—and we know that this is as it ought to be, and in fact an invention *penè divina* for our happiness and well-being. But then we know too, that we are the other antagonist power, and that what we have, like the Yorkshireman in the farce, we mean to keep;—that those who wish to take anything from us, or hinder us from recovering our own by a very brief and blunt application of what we have got already,—are welcome to try, but had better think twice if they feel any interest in not being our enemies. There is a regiment on the other side of the steam-bridge, that manœuvres "uncommon" comfortably, and never a commission by purchase or by fathership among them; and if it was forced upon us, if there was absolutely no escape, the only refuge would be to try something of the same kind here. But the great object of the guides and counsellors of the masses at the present moment, is to prevent and keep down the necessity for any such result. They have been sadly baffled and counteracted by the conduct of those who might have been supposed to have had an interest in concert; and they never had an idea, till they beheld it, of the quantity of downright sheer republicanism which existed in this country, in a state for being disengaged by such impolicy as has been displayed. If they had had the honour of being consulted, the last thing they would have asked the Lords to do, would have been to make such a rampant display of ill-will, followed by such exhibition of inability to resist. In short, they would have begged the Lords, to let themselves down gently; and this merely because their actual conduct produced an excitation on the popular side, which it was not easy to direct into conformity with the purposes in hand. But this was not the fault of the people or their leaders; on the contrary, it was a difficulty thrown in the way by their opponents. The people, however, still adhere to their desire to preserve the old formula of King, Lords, and Commons. The two first have made but a poor show on the present occasion; but the people mean to prop them up. And thereon comes the *how*? And this, too, is one of the things the people intend to see settled, before they abate one jot of the active exertions which have placed them in the situation of men able to take care both of themselves and other persons.

The people, then, do not intend to abate a tittle of their present attitude, till they see the form of government by King, Lords, and Commons, put out of danger;—and most especially out of the greatest danger of all, that of being brought into continual collision with the safety and interest of the community. And the way to do this, is neither doubtful nor obscure;—*Clear*

the way for the present leaders to go on. If anybody should come forward and say, "Good people, you have just had a great victory; whereupon our desire and request is, that you will let your leaders be taken from your head, and the commanders of the enemy be settled in their places,"—if anybody should be gross and foolish enough to say this, it is plain, that unless it had pleased heaven in the interval to visit the people with mental alienation, it would be equivalent to crying "To your tents, O Israel," and to forcing the people to take all the measures *now*, the initiation and demonstration of which were so effectual *before*. It would in fact be asking them to allow their throats to be cut to-day, by the men they hindered from doing it yesterday. Any attempt of this nature would be an act of open hostility; the consequences of which will be visible enough when they come. But it is not enough that this should be impracticable for the moment; the people are not going to stand for ever on a cold hill side, when by the mere display of the legal and irresistible power which is in their hands, they can obtain security for the future and retire to bed. They know that the difficulty lies in the House of Lords. They know that for the last fifty years, men have been poured into that House for the express purpose of supporting the rotten boroughs as long as they could, and in case they should fail on that point, resisting the improvement of the condition of the people afterwards. For example, is it or is it not, matter of notoriety, that *five* rotten boroughs were the market price of a peerage;—that is to say, that it was at one time understood and acted on, that any man who could nominate five Members in the Commons House, might be made a Peer for asking? And in this state of things, it is to be made a question with the people, whether when they and the part of the aristocracy which are their friends are uppermost, the House of Lords is to be adjusted by the introduction of new Members in the ordinary and constitutional way. It in fact makes part and portion of the question, whether the people's officers are to be taken from their head, and those of the enemy substituted in their room. For any minister who should dream of holding office, and surrendering the right of advising and determining the making of Peers to coteries of court ladies or bedchamber lords,—would evidently hold his popularity and his power of carrying on the government about as long, as if he were to concede that the employment of our regiments in making war, should depend on the appetites and propensities of the juvenile princes who present themselves from time to time in hussar dresses to the admiring legionaries. If the formula of King, Lords, and Commons is to continue, the operation of making peers is *the*

operation, in which all the others may be said to be bound up. If the people's minister is not to have it, say so,—and the question is then reduced to whether the people of Great Britain, standing in their present attitude of legal activity and constitutional organization, have or have not the power to prevent their interests from being at the mercy of a ministry of their enemies.

The case in short reduces itself to this. The enemies of the people have been only half beaten; and the question is, whether they shall be whole beaten, or the people shall lay down their arms before them as they are. And the officers, to say the truth, are not to be thought too much of; they are many of them only a half-and-half set, who come to our side because they think it will be the strongest in the end. There are those among them who would take service with the enemy tomorrow, if in the mean time they could ruin us neatly, and without a chance of resurrection. As a proof of it, they are hand and glove with the leaders of the enemy; and when they have a man to send upon a foreign mission, it is just in the enemy's ranks they think of looking for him. They must think us strange idiots if we are taken in by this,—or if it does not breed a steady cool determination, that for every act of this kind they try to commit, there must in common prudence be a step more taken, to advance the power of the democracy at home. If we are to be served by enemies abroad, it is doubly necessary they should be directed by none at home. There must be a purgation—a purgation. A squad of the worst must turn out, and better take their places. Do they expect the English will be cheated like the French in July? There is clear treachery already; our worst enemies are applied to, to do our business abroad. There must be an end of this; and the sooner the better. Either the people have beaten or they have not; and if they have not, it is time they should try. But no frauds of the *juste milieu* here. The example is providential; the same men in France, whom the people in their folly and their stupidity allowed to take the reins when it was in their power to decide, are seen committing every enormity of the preceding government with increased energy, and waiting for another day of popular union to consign them to destruction. The people of England will take warning, and keep free while they *are* free. Their enemies object only to one thing,—that they should be free. The people may do what they please, provided they keep clear of this one unreasonableness—exercising the influence on the government, that shall enable them to take care of themselves. They may have representatives—since it cannot be helped;—but nothing can be so unconstitutional and inconsistent with all good govern-

ment, as their combining in any union which shall make their representatives of use. The secret is simply this, that the government is *not* to be good. The understood bargain is, that the people shall not be free; and all that goes to make them so, is held up as a breach of social order, and to be resisted accordingly.

There is no arguing with opponents of this kind; it is a mere question whether the people have power to hold their own or not. If they have not, they will be squeezed dry as hay; and if they are not so squeezed already, it is only because they have the power of preventing it. Luckily they have the power, as has been proved, of preventing it without coming to actual blows; and this very power, the modest request is, that they should consent to lay aside.

Three things then, the people have a naked right to demand, before they will agree to lay down an atom of the state of preparation for constitutional resistance, which, thanks to the giver of all good, nobody can make them lay down without consent. And these are, first, that there shall be no chance of their being insulted by the proposal for a ministry of their enemies;—secondly, that the way shall be opened for carrying on the government under the present form of King, Lords, and Commons, by either turning out the rotten-borough Lords, or, since no machinery has been provided for such an operation, neutralizing them by the machinery which *has* been provided, the introduction of honest blood to dilute the baseness of the other;—and thirdly, that our own side of the aristocracy should show their honesty, by immediately taking off from us the fetters and badges of slavery laid upon us by our enemies, and that the criterion shall be, their own resistance to the measures at the time they were imposed. But this is but dry bread after all; it wants a condiment, an unction, to make it slip down the general throat, and give it some savour of festive triumph. Besides, men have wives and children, who do not go far into abstract political questions, though they abide the consequences; and for these, there should be something to make a holiday, some trophy gained that they can feel and thoroughly enjoy. For instance, is there no biting, insulting wrong,—no household shame and intruding fireside degradation,—that makes its way to the table where an honest man breaks his fast, and causes him to lay his hand upon his daughters' heads and whisper inwardly, "My dears, you all pay daily for keeping up a great bad house beyond the sea"? Would it not be a glorious thing, a matter for men to think of on their death-beds with delight, a deed splendid and brilliant in the eyes of foreign nations, and which would go down to history as of that

class of glowing national acts for which the opportunity was thought confined to the earlier ages of the world,—if the British people, standing on the summit of their success and on the very ground where their cause was won, should put aside all meaner wrongs, and say, "Rid us of one disgrace,—liberate us from one infamy,—let us go home to our wives and daughters clean men, and not with a conscious dirtiness of soul as payers for our own dishonour. We demand to be freed from it, not because it is impolitic, but because it is felony. We are honest men, and should not pay for "*burking*" our fellow-citizens. We stand here as we are, *till we see an end of Slavery in the Colonies.*" Consider how creditable this would be; reflect how fitting for decent people. Remember how gone-by governments have deceived you with an intended fraud and falsehood in their mouths; how they have stamped and determined the baseness of the act, and then kept you under the avowed baseness for seven years, for the sake of seven years' profits of the wrong. Recollect how certain and indisputable it is, that you have in no instance got anything but what you could command; that if the white slaves are not as ill off as the black, it is owing to one feeling—fear. Just turn in your minds, how simply, how speedily, how effectually, the whole question might be settled, and we and our children walk without an inward blast of degradation in our souls,—if the Political Unions would but agree to demand the abatement of the West-Indian nuisance? What strange people those religious are! Here will they make a point of not paying taxes for an ecclesiastical establishment they dislike, except after the exercise of such resistance as is within the law, to mark their hatreds—and yet not one of them ever moves the question, whether it is consistent with a conscientious man's duty, to pay for the support of known crime without being subjected to the same degree of force. They can protest in the one case, because it concerns their party; they cannot in the other, because it only concerns their souls. A pretty reckoning it will be at the last day, when they are asked, "How came you to refuse church-dues unless your goods were taken, and had not the spirit to refuse in the same way to pay a tax for supporting the flogging of women in the West-Indies?" They will say perhaps, that Peter caught a haddock. But it was not set before him in its nakedness, "Friend Peter, now thou knowest, that what thou fishest for, is to keep a brothel in a Roman colony." And Peter's too, was the act of a man submitting to foreign conquest to avoid bloodshed, and not of a free citizen giving the approbation of his consent. If the only consequence of refusing the Roman tax-gatherer, would have been the taking of a cup or platter out

of that house that like a good man he nursed his wife's mother in, it may be very doubtful whether Peter would have gone to fish. Or some will say, You may use the dearer sugar. But why are our consciences to allow of paying for the infamy without resistance, in this way more than in the other? But these things go by fancy. It is very odd, nevertheless, that any man should fancy paying for such disgrace, while there is a way of vindicating, not his pocket, but his honour,—not his interest, but his conscience of not having submitted cowardly, without a protest, to degradation. Such things, however, require concert. Everything must have a beginning. Come forward one man, and there shall be two; which is a considerable progress geometric, whatever it may be arithmetically. It would be splendid energy, that what men would not do in their own cause, they should do in the cause of others. Suppose we were taxed to pay to keep "*burkers*." Would it not be the duty of a well-bred Christian to refuse? Put it on this ground, if preferred; say that as gentlemen you cannot think of it. There is one set of men, however, who must be treated gently when the time comes; and those are the hereditary owners. A man cannot help the place he is born in. There are good people everywhere; but they must show themselves. One of the most humane and amiable men the writer of this ever knew, was born the hereditary master of a slave-factory on the coast of Africa. But for the men who join for filthy lucre, have neither pity nor remorse. They have had time enough for warning; and any loss to them will be only part of their speculation. They entered on it, knowing they were entering on a condemned business; and set their gains accordingly. If an insurer chuses to insure for a high premium on an act of desperate piracy, is that any reason the piracy should be spared?

Suppose again, that after seven years' promise to abate the "*burking*" nuisance, a committee was sitting to report on the state of the wells and premises. Would not the first question be, "Have they examined, do they mean to examine, is there any chance that they will examine, will they allow anybody to bring to be examined, any single individual of the class on whom the "*burking*" falls? Consider what would be thought of an operation, whose manifest end and object was, to bring up the "*burkers*" and invite them to give evidence for themselves. You are played with; you are made fools of; go to the Political Unions and make men of yourselves, and then hold up your heads before your wives and families. Be well prepared too with the bowels of the question. If any man tells you to look at the magnitude of the trade, tell him that all trade supported by a tax, is paid for twice, once by the payer of the tax, and once more

by the people from whom the honest trade is taken. Ask him why a trade in honest sugar should not be as good as in sugar you are disgraced to pay for. If he says there are slaves in the East Indies too,—first deny it,—secondly, ask him why, villainy against villainy, there is to be that particular villainy that you must pay for. If anybody points to the revenue and to shipping, tell him the same might be derived from an honest trade, and more; and that the boast of revenue and shipping from a trade that cannot keep itself, is a simple cheat for the benefit of the concerned. If any man tells you he has been credibly informed the slaves are happy, ask him if he would believe his informants if they told him the fish in a frying-pan were happy. Can a slave marry, can a slave prevent his children from being sold to other lands, can a slave give evidence of the rape of his daughter or the murder of his wife, though he saw it with his eyes? Oh, a man who can do none of these, must be wondrous happy;—what a "cake," what a piece of unleavened dough, must he be that can be persuaded of it! An Englishman may lack fresh beef; but what would he think of a law, which made it criminal to have fresh beef in his possession? Would *this* come home to him, and persuade him slaves were comfortable? All this is done, and you, *you*, pay for it; and for no other end to yourselves, than that men shall come into your legislature to vote against your happiness. Is it true or not, that the West-Indian interest has always been in the head and front of the opposition to your own freedom? And how could it be otherwise; would it not have been a disgrace, to have had any interest it could have in common? Things may be endured to a certain length; but there are lengths that men who have lived where "bells have knoll'd to church," respectable men, well-educated men, decent men, men who have the habits of good society, cannot endure,—there is a better word, *will not*. Don't endure it;—you may put it down in two months if you like. You have gained greater things than this; gain this. If the government should put forward any plea of difficulty, tell them it is the first time the people of England have been advised to fear an enemy kept up by a vote of the House. Hear no pleas on the probability of insurrection. Tell the "burkers," the sooner the "Italian boys" can rise upon them, the better for you; and that after having had seven years to abate the nuisance, they must be their own insurers. At last the press of England has taken up the right tone on that point*; and has boldly declared, that insurrection is what the slaves must look to for relief. The people of England is with them heart and soul. How does an officer or

* Morning Chronicle. Examiner.

soldier expect to be received, who comes back after performing the part of Jack Ketch for our enemies? Once more to the Political Unions,—don't endure it; but hold together like burrs, till you see this foul, indecent, unmanly shame wiped off from you and your posterity.

Do all this, and there will be something done for the "Prospects of Reform." Afterwards the means will be of a more ordinary kind. The choice of good men to be representatives, is the great end to be pursued. For this purpose, the Political Unions are a ready organized set of committees. Chuse no man, that will not be your delegate, or resign when your opinions clash. It would be an improvement still, if he could be paid as in the olden time, and as in America at this day. It would be a pleasant thing to hear a member say, "My constituents, whose money I take, and whom of course I cannot go against." This is the true footing. If men have interests, they pay the lawyer they think can serve them. If lawyers offered to serve at their own expense, what would be the inference, but that they paid themselves out of the property that came before them? As to what should be demanded of such delegates, it would be useless to attempt a digest here; the work last cited in the head of the Article, is the legacy of the great man who is just gone to the Power that made him. The other books cited in the same place, afford copious illustrations of what there is to oppose and what to amend; and though perhaps not invariably right, they in the main give a formidable opinion of the judgment as well as talent of those who mean to set about the operation. One word of advice may be not unseasonable. Take care not to be deceived by the strategems of the enemy. Let no man, for instance, unless he has a tail of some other asinine appendage, be taken in by such a raw jest as the Factory Bill. A Tory club have cut us off from our trade,—made laws that we shall not sell the labour of our hands,—reduced us and ours to the bare possibility of keeping soul and body together by labour the most excessive, and toil the most extravagant;—and these very men shall come forward and tell us, *that if we will send them to parliament* to support all this abuse,—to maintain the Corn Laws, and keep down all chance of being allowed to sell our goods abroad,—they will do, *what?*—pass a bill to prevent us from working our own children more than ten hours a-day. This is kind; this is benevolent; this is worth a man's going on his knees in the mud to thank them for. Get liberty to buy and sell, ye Issachars, ye asses couching between two burdens; and then your children may live by your labour, without leave from those who starve you. If negro slaves did anything so absurd, the world would say, how debasing the effects of

slavery! Feel every man for a tail, who talks of such a thing. Time was, a Yorkshireman might walk abroad, with some consciousness of being supposed as knowing as his neighbours. If fooleries of this kind go on, Gotham will be put in Schedule A, and the representation of unreason transferred into the West Riding.

PROGRAMME to the WESTMINSTER REVIEW, for 1 October, 1832.

THE Tories in their wisdom have set on its legs the question of the Ballot. Lord John Russell says he will support it *if*,—and everybody else is moving to support it *because*. The great object for the country just now, is to give the Tories reason to join the cry.

There are symptoms of something very like a *split*, in the United States of America. Such an event would give unmeasured joy to the friends of tyranny in Europe; though if the case be as suspected, the reason would not be much. What the friends of republican institutions have maintained, is that a republic may hold together if conducted with sense and honesty; not if conducted without. An oppression liketh e American Tarif or the English Corn Laws, consisting in preventing one part of a community from buying and selling in the market, that another may enjoy a fraction of the amount,—is undeniably good and sufficient cause for any kind of Revolution, *provided it is certain no other method will avail*. It is the olden problem of the point where the duty of resistance begins; with which mankind by this time ought to be pretty generally familiar.

The "Bank" totters to its foundation; and the East-India Company is reduced to sending out travelling-preachers. The meeting at Birmingham has repeated the phænomenon of the Kilkenny cats; each of the combatants has eaten the other up except the tail. The lovers of misrule appear to have expectations from something that is to be done in Ireland; and the English people is waiting for it, as another opportunity to what a sailor calls "heave and pall." A French fleet is on its way to Spithead, and an English one to the Scheldt. "Conservative" principles are at a discount throughout the world, and mankind everywhere are kicking off the fetters in which they used to dance for the amusement of their masters.

We must be rid of the war party among the Radicals; that is to say, of those who will not allow us the chances of peace which depend on being ready for war in a just cause. For instance, there could not be a remonstrance in behalf of betrayed Poland, but somebody must beg an assurance might be tacked

to the end of it, that England did not mean to go to war. This is selling us, as the *Juste Milieu* have done in France. Not so acted the founders of England's greatness, Elizabeth, and the "Chief of Men." O for four hours of the noble old Republic, before the Whoremaster came back upon us with his bastards;—to pen a petition to the Majesty of all the Russias!

WESTMINSTER REVIEW, 1 October, 1832.

ART. 1.—*An Inquiry into the Nature and Causes of the Wealth of Nations. By Adam Smith. LL.D.—With a Life of the Author, an Introductory Discourse, Notes, and Supplemental Dissertations.* By J. R. Mc Culloch, Esq. Professor of Political Economy in the University of London.—4 Vols. 8vo. Edinburgh; Black, Tait. London; Longman. 1828.

'WITH regard to the "Inquiry into the Wealth of Nations" 'itself, we may observe that, after having been for 'more than half a century before the world, it still continues to 'keep its place as the standard work on the subject of which it 'treats. But during the period that has elapsed since its first 'publication, the science of political economy has, as might be 'expected, made considerable advances; and several of the 'principles laid down by Dr. Smith *have been discovered to be* 'erroneous, or at least to require correction and modification. 'An edition of the work, therefore, was wanted, in which the 'light of these subsequent investigations should be brought to 'illustrate the text, *so that it should still present a view of the* 'science in its modern and improved state. *Such an edition* 'is that before us*. In the notes and supplementary disser-'tations which Mr. Macculloch has appended to Dr. Smith's 'original statements, he has noticed whatever contributions of 'importance have been made to the science since the time of 'that writer; and explained with great ability *the views which* 'at present prevail wherever they differ from those offered in 'the body of the work. A very learned preliminary discourse 'also presents an account of the rise and progress of the sci-'ence up to the era of the publication of the "Wealth of 'Nations," followed by a brief but comprehensive statement of 'the *improvements which it has since received.* To the whole 'work is added an index of unusual fulness, and apparently 'drawn up with great care. So that in these four volumes

* 'An Inquiry into the Nature and Causes of the Wealth of Nations; by 'Adam Smith, LL. D. With a Life of the Author, Introductory Discourse, 'Notes, and Supplemental Dissertation, by J. R. McCulloch, Esq. 3 vols. 8vo. 'London. 1832.

'*we have really a complete encyclopedia of the science of po-*
'*litical economy*, embracing its history from its rise to the
'present day, and detailing all the successive changes which its
'doctrines have undergone till they have been brought to the
'state in which they now are. The price of the book is two
'guineas and a half.'

This is the advertisement and puff collateral in the government's Penny Magazine*; of which it circulates 130,000 copies without stamps. If William Cobbett had put forth such an article on political economy on the plea that it contained nothing that was political,—he would be assailed both for the stamp duty and the advertisement; and honest people's children, struggling to be starved next week instead of this, would be sent to mend their practice in the society of housebreakers. In noting which, it is not meant to play into the hands of the enemy, from whom it is a deliverance to have loosed a little finger though the hands remain tied; but to mark the shabbiness of a government with a whole nation at its back, truckling with the powers of evil, after such a distinct avowal of the desirableness of liberation where the feeling is its own.

All this, however, forms no reason for making an unfair representation of a book in return; though it will be surmised that the extract, especially in the parts here distinguished by italics, is considered as going a little too far. It is an awful thing to have undertaken to mend Adam Smith,—in the event of any failure; and the responsibility is not lessened, by the University of London being in some sort made the scene of operations.

The First Section of the commentator's "Introductory Discourse" contains valuable memoirs of the conflict between comparative light and darkness, from the early periods of history to the publication of Adam Smith's book in 1776. In which it is interesting to discover, that the absurdities which the good sense of the age is opposing with the vigour of recent insurrection, were in fact never left without witness against them; but that in the full bloom and blossom of the wisdom of our ancestors, there were always some of whom the world was not worthy, who kept up in solitude the lamp of heresy and truth.

'The once prevalent opinion, that wealth consists exclusively of gold and silver, naturally grew out of the circumstance of the money of all civilized countries being almost entirely formed of these metals. Having been used both as standards by which to measure the relative

* For June 23, 1832.

value of different commodities and as the equivalents for which they were most frequently exchanged, gold and silver, or money, acquired a factitious importance, not in the estimation of the vulgar only, but in that of persons of the greatest discernment. The simple and decisive consideration, that all buying and selling is really nothing more than the bartering of one *commodity* for another—of a certain quantity of corn or cloth, for example, for a certain quantity of gold or silver, and *vice versâ*—was entirely overlooked. The attention was gradually transferred from the end to the means, from the *money's worth* to the money itself; and the wealth of individuals and of states was measured, not by the abundance of their disposable products—by the quantity and value of the commodities with which they could afford to purchase the precious metals—but by the quantity of these metals actually in their possession.—And hence the policy, as obvious as it was universal, of attempting to increase the amount of national wealth by forbidding the exportation of gold and silver, and encouraging their importation.'—*M'Culloch's Introductory Discourse*, p. xii.

One reason might be, the desire to have at hand the readiest means of transporting value for purposes of war; in short, a military chest.* But so far as this idea was not concerned, the explanation of the zeal for making gold and silver come into a country and not go out, lay in the ignorance of the principle, by which any imaginable quantity of an instrument of exchange above a certain amount (supposing it possible to prevent its escape, which is hardly practicable where there is to be intrinsic value) will always reduce itself to the value of such certain amount, by the intervention of a rise of prices. It was the fallacy of Sinclair and Attwood,—"Make money, and people will be rich—;" without surmising that no man could gain anything by being made the vehicle for two pieces of money instead of one, if the two would only buy the same as the one, and that in addition to this there might be a horrible destruction of the interests of all the labouring classes by the concomitants of the process*.

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* Is it possible that any labouring man should be unable to see, that instead of an increase in the nominal quantity of money (as for instance by the multiplication of bank paper) being a source of advantage to his class, it is by the directly opposite process that *he* would be the gainer? If for instance pound notes were multiplied till two would only buy what one pound does now, would any working man be the better for receiving two such pounds at the week's end, instead of one of the old? But *would he get* the two pounds; and how if he stuck at four-fifths of it instead? And is it not plain that he *would* stick at some such mark; and that the masters would always contrive to have the wages *behind* the altered value of money and not *before*? And on the contrary, if by reducing the quantity of money one pound was made to have the value of two, is it not plain that the operatives would have an advantage of the same kind against the masters in turn, though it is likely they would not be able to make an equal use of it? This is sufficient to account for the zeal of the masters for an augmentation in the nominal quantity of money; and any in-

'It appears from a passage in Cicero, that the exportation of the precious metals from Rome had been frequently prohibited during the period of the Republic;* and this prohibition was repeatedly renewed, though to very little purpose, by the Emperors†. Neither, perhaps, has there has been a state in modern Europe whose early laws have not expressly forbidden the exportation of gold and silver. It is said to have been interdicted by the law of England previously to the Conquest; and reiterated statutes were subsequently passed to the same effect; one of which, (3d Henry VIII. cap. 1,) enacted so late as 1512, declared, that all persons carrying over sea any coins, plate, jewels, &c. should, on detection, forfeit double their value.'—*Int. Dis.* p. xii.

The passage from Pliny is an early specimen of lamentation over the misfortune of men's being permitted to buy instead of keeping the money in their pockets; conveyed in language ludicrously accordant with the wailings of the moderns. Why did not the Romans abstain from pepper, and season with sesterces?

'The extraordinary extension of commerce during the fifteenth and sixteenth centuries occasioned the substitution of a more refined and complex system for increasing the supply of the precious metals in place of the coarse and vulgar one that had previously obtained. The establishment of a direct intercourse with India by the Cape of Good Hope, seems to have had the greatest influence in effecting this change. The precious metals have always been one of the most advantageous articles of export to the East: and notwithstanding the old and deeply rooted prejudices against their exportation, the East

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crease of business or employment to arise from such an augmentation, is manifestly a joke, if the result is to be that two bits of paper are to do the work of one.

It is an astonishing fact, that the operatives should just now be found crying for the very thing, that if they had their wits about them, they would consider as the greatest injury;—the very screw by the operation of which they were reduced, under the Pitt fraud, to the miserable condition they have never been able to get the better of. Day by day were their substantial wages reduced by the successive depreciation of the currency; and the more they tried to overtake the original amount, the farther they were left behind. And still the simpletons are ready to call at anybody's bidding, for an increase of paper money. There is no cure for it but one, Knowledge. *Will* the higher classes take off the tax on that commodity, before the people break into their preserves, or not?

After the above was in types, it was observed with great satisfaction that the same view of the matter had been taken by the author of the Political Register (*Aug.* 18. 1832); of whom there is no man but may say, as Frederick did to Laudon at table, *J'aime mieux vous voir à mes côtés, que vis-à-vis de moi.*

* "*Exportari aurum non oportere, cum sæpe antea senatus, tum me consule, gravissimè judicavit.*" "That gold should not be exported, had been decreed under very heavy penalties by the Senate, in my Consulship, as well as many times before."—Orat. pro L. Flacco, sect. 28.

† 'Pliny, when enumerating the silks, spices, and other Eastern products imported into Italy, says, "*Minimâque computatione millies centena millia sestertiûm annis omnibus, India et Sercs, peninsulaque illa (Arabia) imperio nostro demunt.*" "And on the lowest computation a hundred millions of sesterces [about a million sterling] is taken annually by India, China, and the Arabian peninsula, from our Empire."—Hist. Nat. lib. xii. cap. 18.

India Company obtained, when first instituted, in 1600, leave annually to export foreign coins, or bullion, of the value of 30,000*l.*; on condition, however, that they should import, within six months after the termination of every voyage, except the first, as much gold and silver as should together be equal to the value of the silver exported by them. But the enemies of the Company contended, that this condition was not complied with; and that it was besides *contrary to all principle*, and highly injurious to the public interests, to permit gold and silver to be sent out of the kingdom. The merchants, and others interested in the support of the Company, could not controvert the reasoning of their opponents, without openly impugning the ancient policy of absolutely preventing the exportation of the precious metals. They did not, however, venture to contend, nor is there indeed any good reason for thinking that it really occurred to them, that the exportation of bullion to the East was advantageous, on the ground that the commodities purchased by it were of greater value in England. But they contended, that the exportation of bullion to India was advantageous, because the commodities imported from thence were chiefly re-exported to other countries, from which a much greater quantity of bullion was obtained than had been required to pay them in India. Mr. Thomas Mun, the ablest of the Company's advocates, ingeniously compares the operations of the merchant in conducting a trade carried on by the exportation of gold and silver, to the seed-time and harvest of agriculture. "If we only behold," says he, "the actions of the husbandman in the seed-time, when he casteth away much good corn into the ground, we shall account him rather a madman than a husbandman. But when we consider his labours in the harvest, which is the end of his endeavours, we shall find the worth and plentiful increase of his actions." *

'Such was the origin of what has been called the MERCANTILE SYSTEM: and, when compared with the previous prejudice—for it hardly deserves the name of system—which wholly interdicted the exportation of gold and silver, it must be allowed that its adoption was a considerable step in the progress to sounder opinions. The supporters of the mercantile system, like their prellecessors, held that gold and silver alone constituted wealth; but they thought that sound policy dictated the propriety of allowing their exportation to foreigners, provided the commodities imported in their stead, or a portion of them, were afterwards sold to other foreigners for a greater amount of bullion than had been originally laid out on their purchase; or, provided the importation of the foreign commodities caused the exportation of so much more native produce than would otherwise have been exported, as would more than equal their cost. These opinions necessarily led to the celebrated doctrine of the *Balance of Trade*. It was obvious that the precious metals could not be imported into countries destitute of mines, except in return for exported commodities; and the grand object of the supporters of the mercantile system was to monopolise the largest possible supply of the precious metals, by

* 'Treasure by Foreign Trade, orig. ed. p. 50.'

the adoption of various complex schemes for encouraging exportation, and restraining the importation of almost all products, except gold and silver, that were not intended for future exportation. In consequence, the *excess of the value of the Exports over that of the Imports* came to be considered as being at once the sole cause and measure of the progress of a country in the career of wealth. This excess, it was taken for granted, could not be balanced otherwise than by the importation of an equal value of gold or silver, or of the only real wealth it was then supposed a country could possess.'

'The principles and conclusions of the mercantile system, though absolutely false and erroneous, afford a tolerable explanation of a few very obvious phenomena; and what did more to recommend them, they were in perfect unison with the popular prejudices on the subject. The merchants, and practical men, who were the founders of this system, did not consider it necessary to subject the principles they assumed to any very refined analysis or examination. But, reckoning them as sufficiently established by the common consent and agreement of mankind, they applied themselves almost exclusively to the discussion of the practical measures calculated to give them the greatest efficacy.'

"Although a kingdom," says Mr. Mun, "may be enriched by gifts received, or by purchase taken, from some other nations, yet these are things uncertain, and of small consideration, when they happen. The ordinary means, therefore, to increase our wealth and treasure, is by foreign trade, wherein we must ever observe this rule —*to sell more to strangers yearly than we consume of theirs in value.* For, suppose, that when this kingdom is plentifully served with cloth, lead, tin, iron, fish, and other native commodities, we do yearly export the overplus to foreign countries to the value of 2,200,000*l.*, by which means we are enabled, beyond the seas, to buy and bring in foreign wares for our use and consumption to the value of 2,000,000*l.*: by this order duly kept in our trading, we may rest assured that the kingdom shall be enriched yearly 200,000*l.* which must be brought to us as so much treasure; because that part of our stock which is not returned to us in wares, must necessarily be brought home in treasure." *

'The gain on our foreign commerce is here supposed to consist exclusively of the gold and silver which, it is taken for granted, must necessarily be brought home in payment of the excess of exported commodities. Mr. Mun lays no stress whatever on the circumstance of foreign commerce enabling us to obtain an infinite variety of useful and agreeable products, which it would either have been impossible for us to produce at all, or to produce so cheaply at home. We are desired to consider all this accession of wealth—all the vast additions made by commerce to the motives which stimulate, and to the comforts and enjoyments which reward the labour of the industrious, as *nothing*,—and to fix our attention exclusively on the balance of

* 'Treasure by Foreign Trade, p. 11.'

200,000*l.* of gold and silver! This is much the same as if we were desired to estimate the comfort and benefit derived from a suit of clothes, by the number and glare of the metal buttons by which they are fastened. And yet Mr. Mun's rule for estimating the advantage of foreign commerce, was for a long time regarded, by the generality of merchants and practical statesmen, as infallible; and such is the inveteracy of ancient prejudices, that we are still annually congratulated on the excess of our exports over our imports!'—*Int. Dis* p. xiii.

If the attempt to hedge-in gold and silver was unmixed folly, the Mercantile System was the kind of hybrid denominated half-wittedness. But it should be spoken of with respect, for to this day it would be received with reverence in the House of Commons, and various other quarters it would be invidious to particularize.

'The shock given to previous prejudices and systems by those great discoveries and events, which will for ever distinguish the fifteenth and sixteenth centuries, and the greater attention which the progress of civilization and industry naturally drew to the sources of national power and opulence, prepared the way for the downfall of the mercantile system. The advocates of the East India Company, whose interests had first prompted them to question the prevailing doctrines as to the exportation of bullion, began gradually to assume a higher tone; and at length boldly contended that bullion was *nothing but a commodity*, and that its exportation ought to be rendered as free as the exportation of any other commodity. Nor were these opinions confined to the partners of the East India Company. They were gradually communicated to others; and many eminent merchants were taught to look with suspicion on several of the best received maxims; and were thus led to acquire more correct and comprehensive views with respect to the just principles of commercial intercourse. The new ideas ultimately made their way into the House of Commons; and, in 1663, the statutes prohibiting the exportation of *foreign coin and bullion* were repealed, and full liberty given to the East India Company, and to private traders, to export these articles in unlimited quantities.'

'In addition to the controversies respecting the East India trade, the discussions to which the foundation of the colonies in America and the West Indies, the establishment of a compulsory provision for the support of the poor, and the acts prohibiting the exportation of wool, &c. gave rise, attracted an extraordinary portion of the public attention to questions connected with the domestic policy of the country. In the course of the seventeenth century, a more than usual number of tracts were published on commercial and economical subjects. And although the authors of the greater number appear to have been strongly tinctured with the prevailing spirit of the age, it cannot be denied, that several of them rise above the prejudices of their contemporaries, and have an unquestionable right to be regarded

as the founders of the modern theory of commerce—as the earliest expositors of those sound and liberal doctrines, by which it has been shown, that the prosperity of states can never be promoted by restrictive regulations, or by the depression of their neighbours—that the genuine spirit of commerce is altogether inconsistent with the dark, selfish, and shallow policy of monopoly—and that the *self-interest* of mankind, not less than their duty, requires them to live in peace, and to cultivate a fair and friendly intercourse with each other.'—*Int. Dis.* p. xxiv.

The light thrown on the works and history of the early confessors of Political Economy in England, is interesting enough to authorize a considerable extent of extracts.

'With the exception of Mr. Mun, to whom reference has been already made, Sir Josiah Child is perhaps the best known of all the commercial writers of the seventeenth century. His *New Discourse of Trade* was first published in 1668; but it was very greatly enlarged in the next edition, published in 1690. There are many sound and liberal doctrines advanced in this book. The argument to show that colonies do not depopulate the mother country is as conclusive as if it had proceeded from the pen of Mr. Malthus; and the just and forcible reasoning in defence of the naturalization of the Jews is highly creditable to the liberality and good sense of the writer, and discovers a mind greatly superior to the prejudices of the age. Sir Josiah has also many excellent observations on the bad effects of the laws against *forestalling* and *regrating*; on those limiting the number of apprentices, and preventing the exportation of bullion; and on corporation privileges.'—*Int. Dis.* p. xxv.

'The principal defect in the writings of Mun, Child, &c. did not really consist so much in their mistaken opinions about the superior importance of the precious metals, and the balance of trade, as in those respecting the superior advantages which they supposed were derived from the importation of durable, rather than of rapidly perishable commodities. This, however, was an extremely natural opinion; and we cannot be surprised that the earlier writers on commerce should not have avoided falling into an error, from which neither the profound sagacity of Mr. Locke, nor the strong sense of Mr. Harris, has been able to preserve them. But even so early as 1677, the fallacy of this opinion had been perceived. In that year, there appeared a small tract, entitled, *England's Great Happiness; or, a Dialogue between Content and Complaint*; in which the author contends, that the importation of wine and other commodities, which are speedily consumed, but for which there is a demand, in exchange for money, is advantageous; and, on this ground, he defends the French trade, which has been uniformly declaimed against by the supporters of the mercantile system. I shall make a short extract from this remarkable tract:'

"*Complaint.*—You speak plain; but what think you of the French trade? which draws away our money by wholesale. Mr. Fortrey,*

* 'Mr. Fortrey's pamphlet has been much referred to. It was published in

whom I have heard you speak well of, gives an account that they get 1,600,000*l.* a-year from us."

"*Content.*—'Tis a great sum; but, perhaps, were it put to a vote in a *wise Council*, whether for that reason the trade should be left off, 'twould go *in the negative.*—I must confess, I had rather they'd use our goods than money; but if not, I WOULD NOT LOSE THE GETTING OF TEN POUNDS BECAUSE I CAN'T GET AN HUNDRED; and I don't question but when the French get more foreign trade, they'll give more liberty to the bringing in foreign goods. I'll suppose John-a-Nokes to be a butcher, Dick-a-Styles to be an Exchange man, yourself a lawyer, *will you buy no meat or ribbands, or your wife a fine Indian gown or fan, because they will not truck with you for indentures which they have need of?* I suppose no; but if you get money enough of others, you care not though you give it away *in specie* for these things; I think 'tis the same case."

'The general spirit of this tract may perhaps be better inferred from the titles of some of the dialogues. Among others, we have "*To export money, our great advantage;*"—"*The French trade a profitable trade;*"—"*Variety of wares for all markets, a great advantage;*"—"*High living, a great improvement to the arts;*"—"*Invitation of foreign arts, a great advantage;*"—"*Multitudes of traders, a great advantage,*" &c. &c. But its influence was far too feeble to arrest the current of popular prejudice. In 1678, the year after its publication, the importation of French commodities was prohibited for three years. This prohibition was made perpetual in the reign of William III. when the legislature declared the trade with France a *nuisance!*—a principle, if I may so call it, which has been acted upon up to this very hour, with the exception of the short period during which the commercial treaty, negociated in 1786, had effect.'—*Int. Dis.* p. xxvii.

Though not exactly *Content*'s case as given, it is worth noting how easily the reasoning of 1677 is transferable to the question which puzzles the whole unreformed House of Commons,—of how it can be consistent with wisdom to buy a good bargain of France, unless France will consent to the *reciprocity* of buying a good bargain for herself in turn. It would be long before any sane individual could be found to start such a difficulty with Dick-a-Styles.

'Notwithstanding the immense variety of pursuits in which Sir William Petty was engaged, his discriminating and original genius enabled him to strike out new lights, and to make many valuable discoveries in them all. His treatise "On Taxes and Contributions," published in 1667,—his "*Quantulumcunque*," published in 1682,—his "Essays on Political Arithmetic," first published in 1687, and his "Political Anatomy of Ireland," published in 1691, are among the

1663, and reprinted in 1673. It contains a very good argument in favour of inclosures. The reference in the text sufficiently explains the opinions of the writer in regard to commerce.'

very best of the political tracts published in the seventeenth century, and contain many original remarks, and much curious and interesting information. He seems to have been the first person who has distinctly laid down, though only in a cursory and incidental manner, the fundamental doctrine, that the value of commodities is determined by the quantities of labour required for their production. In his treatise "On Taxes and Contributions," he says, "If a man bring to London an ounce of silver out of the earth in Peru, in the same time that he can produce a bushel of corn, the one is the natural price of the other; *now, if, by reason of new and more easie mines, a man can get two ounces of silver as easily as formerly he did one, then corn will be as cheap at ten shillings the bushel as it was before at five shillings, cæteris paribus.*"——"Let a hundred men work ten years upon corn, and the same number of men the same time upon silver; I say that the neat proceed of the silver is the price of the whole neat proceed of the corn; and like parts of the one the price of like parts of the other:" and, in another place, he observes, "*Corn will be twice as dear when there are two hundred husbandmen to do the same work which an hundred could perform.*"*—*Int. Dis.* p. xxix.

It is to be borne in mind, that this statement is only true in the long run, and of things produced under the absence of monopoly. That two things took the same quantity of labour, is not by itself a sufficient reason why one shall exchange for the other. It may be that nobody wants one of the things at all, or wants the existing quantity at that price. The man who engraved the Lord's Prayer on a grain of wheat, might sell a single grain for the price of his maintenance during the operation; but certainly not a bushel, still less a quarter. As the statement stands here by itself, there is therefore an element missed out; which if it has not led to mischief, may do.

'In the *Quantulumcunque*, the subject of money is treated with great ability, and the idea of draining England of her cash by an unfavourable balance, successfully combated. Sir William has also strongly condemned the laws regulating the rate of interest, justly observing that there might as well be laws to regulate the rate of exchange or of insurance.'†

'The essays on *Political Arithmetic* are too well known to require any particular notice in this place. But the *Political Anatomy of Ireland*, though perhaps the best of all Sir William Petty's political works, is now comparatively neglected. This treatise is not more valuable for the accurate information it affords respecting the state of Ireland in the latter part of the seventeenth century, than for the judicious reflections and suggestions of the author, with a view to its improvement. Sir William was fully aware of the benefits that would result from an incorporating union between Great Britain and Ireland,

* 'See Treatise on Taxes and Contributions, ed. 1679, pp. 31, 24, and 67.'
† 'Pp. 3, 6, 8, orig. edit.'

and from the establishment of a perfectly free intercourse between the two countries. When speaking of the Act passed in 1664, prohibiting the importation of cattle, beef, &c. from Ireland into Britain, he asks "If it be good for England to keep Ireland a distinct kingdom, why do not the predominant party in Parliament, suppose the western members, make England beyond Trent another kingdom, and take tolls and customs upon the borders? Or why was there ever any union between England and Wales? And why may not the entire kingdom of England be further cantonised for the advantage of all parties?" * —*Int. Dis.* p. xxx.

By far the most valuable relic, however, is preserved in the Discourses of Sir Dudley North.

'But a tract, entitled, *Discourses on Trade, principally directed to the Cases of Interest, Coinage, Clipping, and Increase of Money,* written by Sir Dudley North, and published in 1691, unquestionably contains a far more able statement of the true principles of commerce than any that had then appeared. Sir Dudley is throughout the intelligent advocate of all the great principles of commercial freedom. He is not, like the most eminent of his predecessors, well informed on one subject, and erroneous on another. His system is consentaneous in its parts and complete. He shows, that in commercial matters, nations have the same interests as individuals; and forcibly exposes the absurdity of supposing, that any trade which is advantageous to the merchant can be injurious to the public. His opinions respecting the imposition of a seignorage on the coinage of money, and the expediency of sumptuary laws, then very popular, are equally enlightened.'

'I shall subjoin from the preface to this tract an abstract of the general propositions maintained in it:'

"*That the whole world as to trade is but as one nation or people, and therein nations are as persons.*"

"That the loss of a trade with one nation is not that only, separately considered, but so much of the trade of the world rescinded and lost, for all is combined together."

"*That there can be no trade unprofitable to the public; for if any prove so, men leave it off; and wherever the traders thrive, the public, of which they are a part, thrive also.*"—*Int. Dis.* p. xxxii.

In the last proposition, care must be taken mentally to include "in a state of freedom." For the very trick of the robbers of the public is to maintain, that where robbing traders thrive, "the public, of which they are a part, thrive also."

"That to force men to deal in any prescribed manner may profit such as happen to serve them; but the public gains not, because it is taking from one subject to give to another."

"That no laws can set prices in trade, the rates of which must and will make themselves. But when such laws do happen to lay any hold,

* 'P. 34, edit. 1719.'

it is so much impediment to trade, and therefore prejudicial."—*Int. Dis.* p. xxxiii.

Sir Dudley would have made these propositions stronger still, if he had lighted on a distinct vision of the fact, that all that is given to one trader by interference of any kind, is taken once from the consumer, and once over again from some other trader with whom the consumer would have spent the difference in question.

"That money is a merchandise, whereof there may be a glut, as well as a scarcity,' and that even to an inconvenience."—*Int. Dis.* p. xxxiii.

This probably alluded chiefly to the business of a money-dealer. As for example, the dealer in the neighbourhood of the Exchange whose trade it is to supply napoleons to gentlemen going to Calais or Boulogne, must find out that it is as easy for him to have too many or too few for his demand, as it would be if he dealt in pounds of sugar. And the like phænomenon must be traceable on the greater scale. But this does not go far into the money question; though an observation of this kind is probably with most men the first stepping-stone to further knowledge.

"That a people cannot want money to serve the ordinary dealing, and more than enough they will not have."

"That no man will be the richer for the making much money, nor have any part of it, but as he buys it for an equivalent price."—*Int. Dis.* p. xxxiii.

These propositions indicate farther insight than the last; and they only want improving into the demonstration, that as concerns the abstract power of carrying on the exchanges of the public, the quantity of money is a thing indifferent;—because the smaller quantity will rise in value till it is enough to perform the office wanted, and the greater quantity will sink in value till it does no more. This does not include the effects of altering the value of money on debtors and creditors, nor the case where the quantity of money should be inefficient through lack of subdivision; and Sir Dudley manifestly meant the same.

"That the free coynage is a perpetual motion found out, whereby to melt and coyn without ceasing, and so to feed goldsmiths and coyners at the public charge."—*Int. Dis.* p. xxxiii.

There appears to be some inexactness in this. The system alluded to must have been one, not of coining and melting, but of coining and sending abroad. If some men had wanted to

coin and others to melt, they would have exchanged and saved themselves the trouble. But people were encouraged to coin, by the offer of doing it at the public expense, whereby the exchangeable value of the coin was necessarily levelled to the value of the metal contained in it; and then they found out, that this coined metal was as convenient as any other, and rather more so, for making purchases abroad. In which the folly was simply in the government's not finding out, that it was trying to fill a sieve with water, and expending the public public money in coining without any adequate reason.

"That debasing the coyn is defrauding one another, and to the public there is no sort of advantage from it; for that admits no character or value, but intrinsick."

"That the sinking by alloy or weight is all one."—*Int. Dis.* p. xxxiii.

There has been much darkness upon what has been called debasing the coin; and despotic princes have probably been sometimes accused of an imaginary crime like witchcraft. If the coin is debased as it is called, till it is as thin as paper,—or till it is reduced to a piece of gold-leaf which must be pasted on a piece of paper to support it,—or if the ingenuity is carried the further step of issuing the paper without the gold-leaf, but with the image and superscription of the reigning king, or of Abraham Newland, or of any other creature in heaven or earth or in the waters under the earth that shall have the effect of preventing imitation or forgery;—if all this be done, there is not evil done but good, so long as the number of such coins or substitutes for coins is not increased beyond a certain limit. If the sovereign happens to be acting in the interest of his people, as for instance if the operation was intended as the means of carrying on a war of just defence,—he would only have stumbled on a way of raising money without the people feeling how. And if he is acting *against* the interests of the people, it is as well he should take value in a way they do not feel, as in a way they do. It is true that if the people were intelligent enough, they would see the value applied to their own use, and bring the Brother of the Sun and Moon to account for its disposal. But this is going beyond the age. To the present moment, not even the inhabitants of the United States of America have a distinct and general vision of the fact, that a people can demand of its government to save the whole difference of the expense between a gold and paper currency, and to account to the people for the proceeds as rigidly as for a malt-tax. It would therefore be unreasonable to demand this nicety from the despot.

"That exchange and ready money are the same, nothing but carriage and re-carriage being saved."

"That money exported in trade is an increase to the wealth of the nation; but spent in war, and payments abroad, is so much impoverishment."

"In short, that *all favour to one trade, or interest, is an abuse, and cuts so much of profit from the public.*"

'Unluckily this admirable tract never obtained any considerable circulation. There is good reason indeed for supposing that it was designedly suppressed*. At all events, it speedily became excessively scarce; and I am not aware that it has ever been referred to by any subsequent writer on commerce.'—*Int. Dis.* p. xxxiii.

Sir Dudley North may be considered as a kind of Wyclif of economical reform, of which Adam Smith was to be the Luther. There was manifestly a great outpouring on him, considering the darkness of his day.

'A violent controversy had been carried on for some years previously to 1700, with respect to the policy of permitting the importation of East India silks and cotton stuffs. Those who wished to prevent their importation, resorted to the arguments universally made use of on such occasions; affirming that the substitution of manufactured India goods in the place of those of England had been the means of ruining a large proportion of our manufacturers, of causing the exportation of the coin, and the general impoverishment of the country. The merchants interested in the India trade could not, as had previously happened to them in the controversy with respect to the exportation of bullion, meet these arguments without attacking the principles on which they rested, and maintaining, in opposition to them, that it was for the advantage of every people to buy the products they wanted in the cheapest market. This just and sound principle was, in consequence, enforced in several petitions presented to Parliament by the importers of India goods; and it was also enforced in several publications that appeared at the time. Of these, an anonymous tract, entitled, *Considerations on the East India Trade*, printed in 1701, seems one of the best. The author, who is a person of no common talent, has endeavoured to refute the various arguments advanced in justification of the prohibition against importing East India goods, and has also given some very striking and admirable illustrations of the effects of the division of labour, and of the advantages resulting from the employment of machinery.'

'In answer to the objection that the manufactured goods imported from India are the produce of the labour of fewer hands than those made in England, and that by allowing them to be imported, some of our people must be thrown out of employment, we have the following conclusive statements:—'

"The East India trade destroys no profitable English manufac-

* 'See the Hon. Roger North's *Life* of his Brother, the Hon. Sir Dudley North, p. 179.'

ture; it deprives the people of no employment which we should wish to be preserved. The foundation of this complaint is that manufactures are procured from the East Indies by the labour of fewer people than are necessary to make the same in England; and this shall be admitted. Hence it follows that to reject the Indian manufactures that like may be made by the labour of more hands in England, is to employ many to do the work that may be done as well by few; is to employ all, more than are necessary to procure such things from the East Indies, to do work that may be done as well without them."

"A saw mill with a pair or two of hands, will split as many boards as thirty men without this mill; if then the use of this mill shall be rejected, that thirty may be employed to do the work, eight and twenty are employed more than are necessary, or are employed to do a work that may be as well done without them. So if by any art, or trade, or engine, the labour of one can produce as much for our consumption, or other use, as can otherwise be procured only by the labour of two or three; if this art, or trade, or engine, shall be rejected, if three shall be employed to do the work of one, two are employed more than are necessary, or to profit of the kingdom. For if the providence of God should provide corn for England as manna heretofore for Israel, the people would not be well employed to plough, and sow, and reap, for no more corn than might be had without this labour. Wherefore to employ more hands to manufacture things in England than are necessary to procure the like from India, is to employ so many to no profit that might otherwise be profitably employed. For there can be no want of profitable employment so long as England is not built, beautified, and improved to the utmost perfection; so long as we either have or can produce any thing that others want, or that they have any thing that we want."

"We are very fond of being restrained to the consumption of English manufactures, and, therefore, contrive laws either directly or by high customs, to prohibit all that come from foreign countries. By this time 'tis easy to see some of the natural consequences of this prohibition:—"

"'Tis to oblige things to be provided by the labour of many, which might as well be done by few; 'tis to oblige many to labour to no purpose, to no profit of the kingdom, nay, to throw away their labour which otherwise might be profitable. 'Tis to provide the conveniences of life at the dearest and most expensive rates, to labour for things that might be had without. 'Tis all one as to bid us refuse bread or clothes, though the providence of God or bounty of our neighbours should bestow them on us; 'tis all one as to destroy an engine or navigable river, that the work which is done by few may be done by many."

"As often as I consider these things, I am ready to say with myself, that God has bestowed his blessings upon men that have neither hearts nor skill to use them. For, why are we surrounded with the sea? Surely that our wants at home might be supplied by our navigation into other countries. By this we taste the spices of Arabia, yet never feel the scorching sun that brings them forth; we shine in silks

which our hands have never wrought; we drink of vineyards which we never planted; the treasures of those mines are ours, in which we have never digged; we only plough the deep and reap the harvest of every country in the world." *

'But these arguments, however conclusive and unanswerable they may now appear, made but little impression when they were published; and an Act was soon after passed prohibiting the importation of East India manufactured goods for home consumption.'—*Int. Dis.* p. xl.

All that can be suggested to be added to the reasoning of this anonymous writer is, that it should have been wound up into the demonstration, that if an Englishman obtained a handkerchief for six shillings instead of ten through the intervention of the India trade, he had four shillings the more to expend on some English trader; and consequently to stop the India trade was depriving some English trader of both the six shillings and the four, to give them to another, and robbing the wearer of handkerchiefs of four shillings besides. And the ways the wearers of handkerchiefs would have discovered of spending the four shillings if they had been left with them, constitute the "no want of profitable employment" the writer speaks of. And the same with the money saved to the consumers by machinery.

'In 1744, Sir Matthew Decker, an extensive merchant, published his *Essay on the Causes of the Decline of Foreign Trade.* This essay has been frequently referred to by Dr. Smith, and it deserved his notice. Sir Matthew is a most intelligent and decided enemy of all *restrictions, monopolies, and prohibitions whatever.* To give full freedom to industry—he proposes that all *corporation privileges* should be abolished; and that all the existing taxes should be repealed, and replaced by a *single tax* laid on the consumers of luxuries, proportionally to their incomes. The following extracts will give an idea of the spirit which pervades Sir Matthew's work, and of the ability with which it is written :—'

"Trade cannot, will not, be forced; let other nations prohibit, by what severity they please, interest will prevail; they may embarrass their own trade, but *cannot hurt a nation, whose trade is free, so much as themselves.* Spain has prohibited our woollens; but had a reduction of our taxes brought them to their natural value only, they would be the cheapest in Europe of their goodness, consequently must be more demanded by the Spaniards, be smuggled into their country in spite of their government, and sold at better prices; their people would be dearer clothed, with duties and prohibitions, than without, consequently must sell their oil, wine, and other commodities, dearer;

* 'Pp. 51, 52, &c. It is probable that Addison had the concluding paragraph now quoted in his eye when he wrote his admirable paper on Commerce. See Spectator, No. 69.'

whereby other nations, raising the like growths, would gain ground upon them, and their balance of trade grow less and less. But should we, for that reason, prohibit their commodities? By no means; for the dearer they grow, no more than what are just necessary will be used; *their prohibition does their own business;* some may be necessary for us; *what are so, we should not make dearer to our own people;* some may be proper to assort cargoes for other countries, and why should we prohibit our people that advantage? WHY HURT OURSELVES TO HURT THE SPANIARDS? If we would retaliate effectually upon them for their ill-intent, handsome premiums given to our plantations to raise the same growths as Spain might enable them to supply us cheaper than the Spaniards could do,-and establish a trade they could never return. Premiums may gain trade, but *prohibitions will destroy it.*"*

'Sir Matthew applies the same argument to expose the absurdity and injurious effect of our restraints on the trade with France. "Would any wise dealer in London," he asks, "buy goods of a Dutch shopkeeper for 15d. or 18d. when he could have the same from a French shopkeeper for 1s.? Would he not consider, that, by so doing, he would empty his own pockets the sooner, and that, in the end, he would greatly injure his own family by such whims? And *shall this nation commit an absurdity that stares every private man in the face?*—The certain way to be secure is to be more powerful, that is, to extend our trade as far as it is capable of; and as restraints have proved its ruin, to reject them, and *depend on freedom for our security;* bidding defiance to the French, or any nation in Europe, that took umbrage at our exerting our natural advantages."†—*Int. Dis.* p. xlvi.

It is conceived that these extracts from the history of the fathers of commercial freedom *when we get it,* can scarcely fail to be interesting at the present moment, when the fabric of corruption and absurdity is in the act of falling to pieces. And to give any the smallest impulse to such a process, will be held of more utility, than any quantity of contest on disputable points which might have been discovered among the mass selected from.

The Second Section is in part occupied with attacks on Adam Smith, which after all may be characterized as *small,* and which may probably be better met as they appear among the Notes. The Third Section commences with a just tribute to the Essay of Mr. Malthus; as "the first" great contribution to the science of Political Economy, made subsequently to the publication of the Wealth of Nations. It would not have been the less just, if there had been added "the last." The greatest ostensible portion of what has been produced since, has been doing and undoing. Political economy has to the eye appeared to retro-

* 'p. 163.' † 'p. 184.'

grade; though there can be no doubt that on the whole the materials were accumulating for extensive progression. Two or three major mistakes, rashly entered into, and pertinaciously adhered to rather than defended, have distracted the public mind, and given cause to the Philistines to mock; but the intelligence of the community is growing up over the sore, and then the healthy action will go on. In the mean time, the most useful addition that could be made to the investigations of Malthus, would be to direct attention to the means of removing the limit, of which he has demonstrated the consequences and the evils. In a state where commerce is prohibited by Act of Parliament, and the exchange of labour repressed by penal statutes, it is stopping needlessly short of the mark to demonstrate the evil of being shut up, and abstain from inquiring why the shutting up should be continued.

The first Note (in Volume I. page 9) is on the precise meaning of *wealth;* which after all, only means *well-being*, or what man wants as the instruments thereto. It means what he wants and has some difficulty in obtaining; and not what he does not want because he has it whether he will or no. With this understanding, the definition is sufficiently exact; and it is better than that which makes a reference to *value*, because it includes it. It does not appear that Adam Smith has left any practical doubt of his meaning being the same.

The Note on Book I. Chap. I. in Vol. I. p. 20, charges Smith's comparison between the agriculture of rich and poor countries, with having " totally neglected the comparative fertility of soils." This can hardly be just, when he uses the express words (p. 19), " Their lands [those of opulent nations] are in general better cultivated, and having more labour and expense bestowed upon them, *produce more in proportion to the extent and natural fertility of the ground.*" The conclusion of the Note merges into the cart-before-the-horse mistake of Mr. Ricardo upon Rent.

The Note on the Chapter on the Division of Labour (I. 34) is all directed against figures of straw. Adam Smith never said that division of labour was introduced into pin-making because one man had an " innate propensity " to make the head of a pin and another the point; but because (p. 17) " ten persons could" in this manner " make among them upwards of forty-eight thousand pins in a day; but if they had all wrought separately and independently, they certainly could not each of them have made twenty." And in like manner the savage that makes bows and arrows (p. 32), does it because " he finds that he can in this manner get more cattle and venison, than if he himself went to the field to catch them." The Note appears

to be hung upon the fact of Adam Smith having in one place attributed the division of labour to "the propensity to truck, barter, and exchange one thing for another," without adding the words "with a view to gain by it."

In the place to which a Note is appended in I. 60, Adam Smith merely said, that "rents which have been reserved in corn have preserved their value much better than those which have been reserved in money." If any error has been committed, it at all events does not seem to have been here.

The passage incriminated in I. 71, involves no error. It explains the mystery which must have presented itself to every man of middle age in this country,—the mystery of thin sixpences. The truth is that the inferior coins are always mere counters; and may as well be so as not, saving the temptations that may arise to counterfeit, which is not a good, though the evil may not be so immediate and terrible as has been imagined.

The "fundamental error" alleged against Adam Smith's Chapter on "The Component Parts of the Price of Commodities" in I. 81, is not either clearly made out, or very distinctly stated. The bearing seems to be, that changes arising from variations in profits, wages, and rent, will *affect all commodities alike*, and therefore their relative value cannot alter. Now even supposing this to be the case, it was not a bad preliminary process which went to show how there was a tendency for any particular commodity to vary in value from certain causes, even though there should be an ultimate tendency for other commodities at the same time to vary in the same direction. But there is no difficulty in finding a commodity whose value shall vary separately, and precisely from that source which Adam Smith has expressed under the name of rent. *Corn* is admitted by the author himself (See his Introductory Discourse, p. lxxv.) to rise in value with the progress of population; and the excess of this value over the average expense of production goes to the landlord as rent, which is evidently what Adam Smith meant by "constituting rent." What then becomes of the allegation in I. 81? There assuredly must be a mistake in this principle of *affecting all commodities alike*. It is the same that has led to the theory of the impossibility of a *Glut*. There is a perpetual motion, an argument in a circle, in it somewhere.

If monopoly prices are not always "the highest which can be got," it is only in those rare cases where the monopolist is in a mood to give away. The occasion for the correction in I. 103 appears therefore to be small.

The Note in I. 162, bearing that "prices, generally speaking, are the same, whether profits or wages are high or low," must at all events be vaguely expressed, and appears admirably cal-

culated to excite an outcry against political economy. If it meant that a variation in one of the two things profit and wages, has a tendency to be absorbed by an opposite variation in the other, which prevents any effect from reaching the consumer,—this should have been expressed in a guarded manner, and not left open to the interpretation that both profits and wages may be what they will, without any effect upon prices; which can only be true of things produced under a monopoly.

In the suggestion of exaggeration of the injuries arising from corporation privileges (in I. 197), one item against the corporations is overlooked, which is,—that they cause the introduction to the several trades and mysteries to take place by the tedious, the roundabout, and the wasteful way, instead of the speedy and economical, and to indemnify themselves for antecedent sufferings from this source, if for nothing else, their members will assuredly "form an effectual combination for a rise of prices."

The Note in I. 208 says, that "Industry is not really, upon an average, better rewarded in towns than in the country; but traders and manufacturers residing in a town have, as Dr. Smith has already explained, a *greater field* for the prosecution of their industry, or greater opportunities for making a fortune by the employment of a large capital," the result of which is, as explained by Dr. Smith, that a hundred make fortunes in towns for one in the country. *Query*, whether this is not being better rewarded.

The Note on Rent in I. 237 makes the first material introduction of the great vexation of the class of political economists from whom it proceeds. Rent is *not* a consequence of the decreasing productiveness of the soils successively brought into cultivation; and for this good reason, that it exists equally where there is no difference in the productiveness of soils, and no successively bringing into cultivation. It exists in Egypt, where a man may stand with one foot in the rich arable soil, and the other in the dominions of Typhon, as some have construed him, or sand; and it clearly would exist in an island of the South Sea, if such there were, where every inch of soil down to the sea-beach should be of the same uniform quality as a citizen's cabbage-garden at Peckham, from the moment the population began to press against the produce. "It is never heard of in newly settled countries—in New Holland, Illinois, or Indiana, or in any country where none but the best of the good soils are cultivated;" nor would it be heard of in the South Sea island, while the land was newly settled, or till the population began to press against the produce. If there *be* inferior land in existence, then as population begins to press,

this inferior land will successively be taken into cultivation, in the South Sea island, or anywhere else. But why will this particular school of political economists insist on mystifying their fellow-creatures, by putting the cart before the horse, and declaring to be the general cause, what is only an accidental consequence, arising out of foreign circumstances which may exist or may not? Could the art of man have invented a more likely way to go wrong? They say it is a verbal difference. If so, why will they not give it up? At all events they have not satisfied weak brethren, that it is only a verbal difference. The admission that high or low rent is the effect and not the cause of high or low price (Note in I. 241), is almost a concession of the whole. It is admitted that there is high rent because prices are high; but what makes prices high? Answer, because there is inferior land; for they say there would be no rent unless the lands "under cultivation be of different powers" (*See quotation next below*) and "unless inferior lands are taken into tillage," *ergo* the existence of inferior land is the cause of rent; also rent, they say, is not the cause but the effect of high prices, *ergo* the existence of inferior land must cause rent by previously causing high prices,—there is no other way of piecing the two into a whole. If then the inferior land were sunk into the sea, would there cease to be high prices? According to their reasoning there ought. Yet it will be very difficult to persuade the world, that prices would not be *higher* from such a circumstance, or that the effect of the rise upon the lucky owners of the good land left, would not be to raise their rents. But the fact is that in many parts of the present work, there are traces of a desire to escape from the bad position, without carrying it into its consequences. The Ricardo mistake is stuck to in some places, and in others it is virtually given up; which is not fair.

If there were any doubt whether it had really been maintained that the essential and indispensable cause of rent was difference in soils, the following Note in I. 263 would appear to be decisive.

'In point of fact, however, no portion of this surplus will go to the landlord unless the rice fields under cultivation be of different productive powers. The best lands in Indiana are probably as fertile as the best lands in East Lothian, and yet they yield no surplus in the shape of rent to the proprietor; nor will they ever yield any unless inferior lands are taken into tillage.'—I. 263.

There is no escaping from the fact, that the existence of rent is here stated to depend, not upon an increase of demand which shall carry the price offered for the rice to more than the average cost price, but upon "the rice fields being of different

productive powers." This is simply the mistake which the commentator escapes from every now and then, when the consequences press closest; but cannot make up his mind to avow.

In I. 276, Adam Smith means something quite different from what is brought forward in the Note; and the Note brings nothing against him. The demand for coals produces the offer of a certain price; the owner of the "most fertile" coal mine (including evidently, in Adam Smith's meaning, the greatest and most extensive coal mine) has to a certain extent a power of underselling his neighbours, and therefore in a certain degree can regulate and keep down the price of coals. This is Adam Smith's assertion; and the Note only holds of the besetment of the author's school on the subject of Rent.

On the profits of silver mines (on which there is no difference of opinion between the commentator and his original) two powerful reasons exist why speculators in this country should speculate upon disappointment. In the first place, supposing their agents in foreign countries to be ever so unexceptionable in integrity and zeal, their employers at home, from the very nature of the pursuit, may always rely on exaggerated representations of the chances of success. It is not in the nature of man to go on such an errand, and not make the most of his expectations for tomorrow. And secondly, if the success should be ever so great in point of quantity, this very success must have an effect in pulling down prices, vastly more rapid than anybody is likely to calculate upon. From these two causes, no business upon earth might be so safely betted against, as the business of the silver miners.

On the fallacy charged against Adam Smith on the subject of corn in I. 307, it is desirable to remark that what he says is not "that corn is, upon an average, the most invariable of all commodities in its value," (which, as taken from p. lxxiv. of the commentator's Introductory Discourse, was possibly the understanding of the commentator); but that "the raising of equal quantities of corn in the same soil and climate will, at an average, require nearly equal quantities of labour, or what comes to the same thing, the price of nearly equal quantities." The two propositions differ by the whole difference between value and cost. A bushel of corn may be conceived to be raised in *value* by the pressure of population and corn laws, to the value of its bulk in gold; but it does not follow that the *cost* of raising an average bushel of corn will thereby be raised in anything like the same proportion. The commentator has gone aground on that perpetual rock of his order, the fact that such a price of corn would cause its cultivation to be pushed into

some nooks and crannies where for instance nine-tenths of a bushel of gold might be expended to secure the whole one.

The Note in I. 347, like another before remarked, is worded in a way to give rejoicement to the enemy. That

> 'the proportion between the average values of any number of freely produced commodities depends upon the comparative *cost of their production*, and is not in the slightest degree influenced by the quantities of them brought to market,'

may be true under explanation, but looks fearfully like a paradox without. The missing solution is, that the quantities brought to market will *in the long run* be such as will keep the average values proportioned to the comparative costs of production. It cannot be said this is happy.

In the Note in I. 407 where it is said that "the condition of all the other classes is as much improved by a decline in the value of manufactured goods, as that of the landlords," it surely is not intended to maintain, that the condition of the manufacturers is as much improved. It may be improved to a certain extent; that is, a certain deduction may be made for the part which falls on themselves as consumers. If Wedgewood's ware falls in value, Mr. Wedgewood may congratulate himself that he drinks tea out of a cheaper tea-pot. And in the same way of other orders of manufacturers. But it may be vehemently doubted whether their condition is "as much improved as that of the landlords." This is another instance of inaccuracies put forward in the shape of most impolitic paradoxes.

In Dr. Smith's assertion (I. 408) that "the proprietors of land never can mislead the public with a view to promote the interest of their own particular order, *at least if they have any tolerable knowledge of that interest*,"—it is feared he must stand principally on the reservation in italics. When the poor-rates have eaten up a little more of the landlords' rents, they will begin to find out that they have *not* had any tolerable knowledge of that interest.

In the Note in Volume II. p. 5, the definition of Capital accumulates ideas which it should be the object of science to separate. Capital, is wealth employed in the production of other wealth. Adam Smith does not always confine it to this sense; but the business of an improver is to discern. A horse yoked to a gentleman's carriage, is wealth being enjoyed, not wealth employed in the production of other wealth; unless perhaps the gentleman should be a visiting physician. The same horse yoked to a brewer's dray, is not wealth being enjoyed, but wealth employed in the production of other wealth. The brewer does not exult in his horse by reason of the pleasure of seeing

him draw, but by reason of the pleasure he expects from the possession of the proceeds. The question is not of *capacity*, for all horses may be capable; but it is of what the horse does. To say that all horses are "capital" because they are capable, would be like saying that all men are "fathers of families" for the like reason. If any person insists on employing the term "capital" for everything that is of value, he must do it if he pleases; but the other is the application which is useful.

Adam Smith stopped short in a metaphor, when he spoke of "the channel of circulation" and the necessity that whatever is poured into it beyond a certain sum must overflow (II. 31). To have gone into the subject, would have led him to the principle of depreciation; one of the most important at the present moment that can be named. But it is impossible for a man to have done everything.

When Adam Smith said (II. 78) that gold and silver money "is a very valuable part of the capital* of a country, which produces nothing to the country," he plainly meant, "produces nothing but its effect as the instrument of exchange, which paper might do as well." An honest issue of paper money,—which means issuing the paper by means of a national Office and crediting the public with the amount of issues,—*would* "convert a great part of this dead stock into active and productive stock." It would turn the unnecessary gold, into gold as active and productive as any other in the hands of bullion dealers. To "substitute cheap in the place of dear instruments of exchange" (Notes II. 78), is in fact to do this with all that before was employed to waste.

There is a much more effectual way than "compelling bankers to give ample security for their notes," to "protect the public against their insolvency and bad conduct" (Note II. 84); which is, to allow them to issue none. Every note issued by private bankers, is so much of the public property given away by the government for sinister purposes, in the same way as if men were allowed to wheel away the pitch and tar out of the dockyards. There are two perfectly distinct functions, which it is the interest of the public enemy to confound; the function of discounting, lending, and keeping cash accounts, which is *banking*,—and the function of making paper money. The first is a trade; and ought like other trades to be carried on by individuals and not by the government. The other is not a trade, but an exercise of public power; and ought to be exercised for the public, and not for individuals.

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* This is an instance where Adam Smith uses "capital" in the too extended sense.

The distinction between "productive" and "unproductive" labour, appears to have been most unfortunate in its terms. It clearly was not meant to say, that there was labour that produced *nothing ;* for if so, wherefore was it laboured? And if Kemble is an unproductive labourer, why is not a ploughman, a grazier, or a brewer? There is about as much left of one man's performances as the other's, the day after the enjoyment. The only substantial distinction that can be set up among species of labour, is analogous to that formerly stated between "capital" and wealth applied to direct enjoyment. There may be labour employed for the production of things which are useful as they lead to the production of other things, and there may be labour for the production of things that are to be enjoyed in their own proper substance. A corollary may be held to be, that all labour of the first kind is exerted with a view to its being accessory to labour of the second; for no man labours for labour's sake, but that somebody may enjoy. The terms "productive" and "unproductive," may on the whole be surmised to have arisen out of a confused notion of labour well and ill employed.

The Note in II. 150, is full of the Ricardo mistake on Rent. At the same time there can be no doubt that Adam Smith had not entirely escaped from the mist of the French *Economistes ;* whose error lay in not discovering that the wonderful powers attributed to earth and rent, were all resolvable into one man taking from another man by virtue of a monopoly.

Adam Smith would not have said, that "to expect that the freedom of trade should ever be entirely restored in Great Britain, is as absurd as to expect that an Oceana or Utopia should ever be established in it" (II. 305), if he had possessed a clear vision of the fact, that everything which is gained to anybody in consequence of prohibition, is lost twice over, once by the consumers, and once more by the English traders on whom they would have spent the difference. Wait till the knowledge of this becomes vernacular.

Adam Smith's digression on the Bank of Amsterdam (in his Fourth Book, Ch. 3) may be noted as leading to the solution of one of the most curious problems in the range of political mathematics,—the mode of production of the phænomenon called an *Agio.* A piece of paper shall pass for four, five, or fourteen per cent more than the coins it purports to represent, in consequence of certain conveniences and superiorities which are perhaps visibly not worth more than half-a-crown; and, which is the most curious point, these conveniences shall be obtained for nothing by the circulator after all, for he passes the paper for the same value that he received it, without ever deducting

the half-crown. There may be reason to believe that the explanation of this phænomenon is the *experimentum crucis* of that theory of the value of currency, which maintains that the value of a currency, metallic or paper, may be raised to any level by merely limiting its quantity; a theory which the author (Note II. 90) has been observed as receiving with assent.

In the Note in III. 10 it is stated, that

'Profits are the excess, or the value of the excess, of the commodities produced by the expenditure of a certain quantity of capital and labour, over that original quantity of capital and labour, or its value. It is clear, therefore, [*why?*], that they must be wholly unaffected by the mere extension of the field for the employment of capital, how great soever that extension may be.'

The query that arises on this is, whether all extension of the field for the employment of capital, is not attended at the time with an increase of the rate of profits, and whether this is not the very instrument of inviting capital to occupy the new opening. There seems to be a confusion of the effect *after* capital has run in, with the effect *during* the running in.

On the Note in III. 139 it may be observed, that the error of the *Economistes* did not lie in the direction there stated, but, as before intimated, in the non-discovery that all that was got for rent by one man was taken from another.

The restriction of banking companies in England to not more than six partners, reduced in 1826 (see Note III. 262) to a circle of sixty-five miles round London, is a subject often brought into debate at the present conjuncture. If the pitch and tar in the dock-yards were allowed to be wheeled away by companies of six, and the question were whether it should be allowed by companies of sixteen,—the solution would mainly depend on whether anybody was impeded by the restriction. If they are, the restriction is a comparative good; and if they are not, no reason is produced for the alteration demanded.

The charge of fallacy in the Note III. 420, appears to be untenable. If the producers cannot indemnify themselves for a tax on profits out of some rent or other, they will give up the production altogether. It is part of the Ricardo mistake on "the portion that pays no rent."

The price of sugar from Jamacia (Note III. 482) has at all events been a monopoly price ever since an extra tax was laid upon the sugars that might compete. The fact that every individual who pleases may carry his capital and industry to Jamaica and become a producer of sugar, is as much beside the mark, as would be the fact that he may become a grower of corn under the corn laws.

The state of the case with respect to Public Debts (IV. 1) is, that the government seizes upon some sum, as suppose a hundred millions, not in its gross shape, but in the shape of the perpetual annuities which are of the same value in the market; and then it sells these annuities, to people who are willing to give the gross sum in return. Hence a hundred millions raised by funding, is as irrecoverably spent and thrown away (saving any utility there may be in the objects on which it is spent) as if it had been raised by a poll-tax of 100*l.* apiece on a million of the inhabitants. People may squabble afterwards about the payment of the interest; but nothing can restore the hundred millions. Despots unhappily have found this out; and if England is ever overrun by the Holy Allies, whose limbs are in our high places, they will levy the largest amount they can by funding, as they did in France; knowing that to the citizens of England afterwards, the evil will be as irreparable as the docking of a horse,—they may carry their tail in any way they like, except putting the old one on again. Hence that the debt is only owing from one Englishman to another, is a good argument so far as it is to prove the impossibility of gaining in the aggregate by refusing to pay the interest;—no argument at all, if it is to prove that the debt is not an enormous evil, for which the authors should be made responsible if they had not taken care to get out of the way. In England there is fortunately the option of allowing the country to outgrow the debt by restoring the freedom of trade and particularly the trade in corn. And if this is not done, the result will be, first a rush upon the fund-holders, and then, as this can produce no aggregate improvement, a rush upon the property of everybody else that has any. For all which, those who persevere in prohibiting commerce by act of parliament, will justly be responsible.

Nearly the whole of the Fourth Volume consists of Supplemental Dissertations under the title of Notes. The first is on the definition of Labour. Few persons have hesitated to believe, that labour means the exertion of living agents, and that it is not usual to say a steam-engine labours. The reason given in IV. 77 why we ought to say so, appears highly inconclusive. It is, that

'If a capitalist expends the same sum in paying the wages of labourers, in maintaining horses, or in hiring a machine, and if the men, the horses, and the machine can all perform the same piece of work, its value will obviously be the same by whichever of them it may have been performed.'

From which it is argued, that "whatever actions or operations

have the effect to communicate the same value to the same or different articles or products," ought "all to be designated by the same common term." Now the fact is, that the communicating the same value, is the only thing in which there is any sameness; and therefore it is this, and not anything else, that should be "designated by the same common term." The whole of this Note may be considered as a specimen of confounding instead of discerning.

Note II is on "Value;" a word on which there has been infinite debate. The value of a thing [*valor*], in the primary sense, is how much [*valet*] it is equivalent to, or will fetch of some other thing or things in exchange. In this sense there seems as little possibility of assigning value to a thing, without reference to some other thing, as of assigning ratio. And as ratio may be defined to be that relation of one magnitude to another, which is sought by inquiring what multiple, aliquot part or parts, of the one, is equal to the other; so value, in the primary sense, may be defined to be that relation of one substance to another, which is sought by inquiring what quantity of the one will voluntarily be given in exchange for an assigned quantity of the other. But after this relation has been determined between all imaginable substances respectively and one particular commodity, which in all civilized societies is money; by a slight metastasis, the substances which will exchange for equal quantities of money are said to be of equal values, and substances which will exchange for different quantities are said be of values proportioned to those quantities. And by a further licence, the *value* of a thing comes popularly to mean the quantity of the general measure, money, for which it will, at the period that may be in question, exchange. Hence there appears no difficulty in ascertaining the meaning of *value*, when applied to the comparison of objects at the same period and in the same state of society. But if question were to be made, of "What was the value of silk stockings in the time of Queen Elizabeth," or "What was the value of a tenpenny nail in Otaheite on its first discovery by Europeans," it could apparently only be answered by approximation. There need be no hesitation in stating, that in both these cases the things mentioned were of *much higher* value than in England at this moment. But if greater precision is insisted on, there seems no resource but expressing the values by reference to exchangeable things of some kind, which though they do not necessarily afford an exact measure, afford something like an approximation, of the accuracy of which an estimate may at the same time be made by the inquirer as far as he is able. For example, the silk stockings or the nail may be stated to have been equal to

so many days labour of the lowest kind of labourers, or so many of some higher kind; though it does not even follow that the proportion between the numbers presented by these two modes of expression, should be the same that it would be in England at this day. Or it might be estimated in *hogs*; though it does not follow that a hog in Otatheite or in Elizabeth's time may not have been a more lordly dish than in England now. Value, therefore, like greatness, has in all cases a reference, direct or implied, to something else. And if there was no one thing in existence which could be trusted to have precisely the same proportion in respect of magnitude to other things that it had in the time of Elizabeth, there would be the same difficulty in settling the magnitude of things in that æra, that there now is in settling their value.

An intricacy is observable in some parts of the commentator's work, arising from the intrusion of the fact, that the value of things produced without monopoly, is perpetually gravitating towards the cost of production. This may be true, but there is no use in continually bringing it forward in a way that tempts the reader to believe they are the same; for the fact is that they are never the same, or only for such comparatively rare periods as a swinging body is at the lowest point. And this perpetual oscillation on both sides of the cost price, instead of being an inconsiderable accident, is in reality the great agent by which the commercial world is kept in motion; and it depends for its existence on the principles of Monopoly Price,—the sellers having to a certain degree a monopoly in their favour whenever the quantity in the market is *less* than could be sold at the cost price, and the buyers having an advantage of a similiar kind when the quantity in the market is *more*.

Rent, which is the subject of Note III, is another mere corollary from the principles of Monopoly Price. A *monopoly* is when the quantity of a commodity is limited either by nature or art, so as to cause the competition for it to raise the price higher than the average cost of production. A monopoly may be of the kind in which no part of the produce costs comparatively more in production than any other part; as may be the case with the *Eau de Husson*, which, if as generally surmised it is only an extract from some common vegetable, might be made by cart-loads without comparative increase of cost. Or it may be of the kind where a certain part of the produce is raised at a somewhat increased cost, though this process may not be carried so far as that any particular portion of the produce can be assigned which sells for no more than the cost price; as may be the case with Tokay, in the raising of which it is probable that there are portions of the vineyard that require

comparatively more labour than some others, but none whose produce does not sell for more than the cost price,—and moreover possible enough (for the vine is said to abhor manure), that there may be no such thing as increasing the produce by any higher degree of what is called *dressing*. Or it may be of the kind in which portions of the produce may be raised at different costs, up to that which swallows up the whole price; as is the case with the corn raised from the various qualities of land in the hands of the landlords in general. But in all these cases the principle of Monopoly is one, and the varieties are the results of the diversity of extraneous circumstances. There is no more ground for maintaining any difference in the common principle, than in maintaining that there is a difference in the principle which causes a man to fall from a church steeple, a waggon to run down hill, and a bullet to describe a parabola instead of flying off in the tangent. And this seems to furnish the reply to an objection received from a highly eminent name in political economy, against having called Adam Smith's the "True Theory of Rent." It may be that he did not trace the full extent of the difference, between a monopoly of class No. 3 like corn, and one of class No. 2 like Tokay; but if he has struck out the leading principle of both cases, he may be held to have a good general claim. A man *must* leave something for posterity.

Great part of the Note on Rent is occupied by replies to the objections urged from various quarters against the unhappy mistake on the subject of "the portion of produce which yields no rent," which has had a sensible effect in retarding the progress of political economy for nearly twenty years. These were conclusively answered by Say in the year following their publication; whose assertion that "*the so called theory of rent, has introduced no new truth into the science of political economy, and explains no fact that is not explained more naturally by the truths that had been previously established**," might easily have been carried forward into the demonstration that it has been productive of extensive practical error.

On one part of the objections the commentator says,

'Besides the objections which have now been examined and refuted, another has been urged from time to time against the theory of rent, as now explained. The authors of this objection affect to suppose that Sir Edward West, Mr. Malthus, and Mr. Ricardo, considered the cultivation of inferior land as the *cause* of a high price of corn. But this, they allege, is to invert the order of the phenomena;

* *Say*, Vol. iv. ch. 20.

the cultivation of inferior soils not being the cause but the effect of high price, and this high price being itself the effect of demand. This very doctrine, however, has been explicitly laid down by the distinguished authors previously referred to, and particularly by Mr. Ricardo.* They have no where contended that a high price of corn was *caused* by the cultivation of inferior land; what they contend is, that it is caused by the *necessity* under which every increasing population is placed, of cultivating such inferior land, or being starved. The wants and desires of man are the *cause* why all commodities are produced, and are, by consequence, the cause of their value; but it is the difficulty experienced in gratifying these wants and desires, or, in other words, the cost incurred in the production of commodities, that measures and regulates this value. This is the theory laid down by Mr. Ricardo and the other expounders of the doctrines of rent, and it cannot be in any degree affected by the petty cavils alluded to.'—IV. 116.

This statement has many inaccuracies. The objection alluded to, was not that the expounders of the new doctrine maintained *a high price of corn* to be caused by the cultivation of inferior land, but *rent;* though it would not have been far wrong if it had said the other, and the commentator says so himself in this very book. By a bounty on corn exported from England to Spain, (IV. 335), he says, "Corn would be permanently re- "duced [in price] in Spain, because the unusual cheapness of "the foreign supplies *would throw the poorest cultivated lands* "*of that country out of tillage;* and it would be permanently "raised in England, *because the increased demand would* "*stimulate the bringing of poorer lands under cultivation.*" Is this saying "the bringing of poorer lands under cultivation" is the instrument of "raising" price, or not? The upshot therefore is, that the supporters of the new theory do not always know what they have said and what not; and consequently they say and unsay. All of which is great damage to political economy.

At the same time the difference between saying that the cultivation of inferior land causes *a high price of corn*, and that it causes *rent*, is intrinsically little or nothing; for it is only by causing a high price of corn, that it can be imagined to cause rent. Only if instances had been adduced where the cultivation of inferior land was stated to cause *rent*,—as for example in the Note I. 263 of the commentator, before quoted in its order,—the commentator would probably have turned round and claimed the benefit of the distinction.

The conclusive proof of the weakness of the new theory, was

* 'See his Principles of Political Economy,' &c. 3d edit. p. 178.'

that it led to conclusions contradicted by experience on the incidence of tithes and poor-rates, consisting in the assertion that they fell on the consumers. The commentator appears to have given up both these consequences, but to maintain the premises. It has therefore become incumbent on him to show, where the error was which can authorize allowing the consequences to be wrong and the premises right. And it is more especially required of him, because he is a convert. He formerly maintained stoutly, that "tithes and other taxes on raw produce do not form a deduction from rent, but go to increase the price of produce*." The truth is the commentator has been driven out of mistakes of his own and other people's by the "petty cavillers," and is not thankful.

The Notes on Population, on the Consequences of the Use of the Potato, and on Wages, might all be directed with advantage into a demonstration of the horrible cruelty and injustice which prohibits foreign commerce by Act of Parliament. They tell but half their story; they discuss the evil, its symptoms, and its progress, but stop short when they ought to point out the maintaining cause. It is a cruel joke to talk about the evils of an increasing population, when that population is cut off by law from the power of selling the produce of its labour, for the interest of a robber caste; who tell us plainly, that like the French *noblesse*, they will pay no taxes, unless they may have liberty to take the amount again from other people, and who, if speedy change of mind be not vouchsafed them, will come to the same rough end.

The Note on the "Circumstances which determine the Rate of Profit," is intended for an overthrow of Adam Smith's opinion on that subject. The reasoning adduced contains an odd specimen of fallacy. The object is to prove, that though competition may equalize profits, it cannot reduce their general amount.

'It is easy to see that competition can never produce a general fall of profits. All that competition can do, and all that it ever does, is to reduce the profits obtained in different businesses and employments to the *same common level*, to prevent particular individuals from realizing greater or lesser profits than their neighbours. But farther than this competition cannot go. The common and average rate of profit does not depend on it, but on the excess of the produce obtained by the employment of a given amount of capital, after replacing that capital, and every contingent expense. Suppose, for the sake of illustration, that a manufacturer has a capital of 10,000*l.*, the half of which

* See Art. TAXATION in the Supplement to the 4th and 5th Editions of the Encyclopædia Britannica, p. 630.

is expended in buildings and machinery, and the other half in paying the wages of his workmen, and that his taxes amount to 100*l.*; suppose now that the produce annually obtained by this manufacturer is 12,000 yards of broad cloth; and that this produce is sufficient, besides replacing the whole of that portion of his capital which is devoted to the payment of wages, and whatever portion of the fixed capital may have been wasted, as well as paying his taxes, insurances, and all other necessary outgoings, to leave him 1,000 yards of cloth, or 1,000*l.* of surplus. The profits of this manufacturer would be at the rate of ten per cent.; and it is obvious that they could not be affected by the most intense competition. Competition cannot affect the productiveness of industry, neither can it, speaking generally, affect the rate of wages, for, such as the demand for labour is, such will be its supply, and it cannot affect the burden of taxation. It is plain, therefore, that it can have nothing to do in determining the common and average rate of profit. It will prevent any individuals from either getting more, or taking less, than this common rate; but it can have no further effect.'—IV. *p.* 189.

Now upon this, "it is easy to see," that though competition might not affect the fact of the results from the capital of 10,000*l.* being 12,000 yards of cloth, it is just the thing which will affect their being worth 12,000*l.* and leaving a surplus of 1,000*l.* If competition should lower their marketable value to 12,000 pence, it is surmised the capitalist would be in a melancholy state. And it is precisely because men will not employ capital for less than a certain rate of profit,—which may be supposed the rate which will arise to the cloth manufacturer from the 12,000 yards being worth 12,000*l.*,—that cloth will be manufactured to the amount which will cause 12,000 yards to be worth 12,000*l.*, and to no greater. Here therefore being a singular fallacy and mistake, it may be concluded that Adam Smith was right when he maintained that profits were lowered by the competition of capitalists and raised by its absence; the inferior limiting cause, or that which prevents capitalists from offering competition beyond what will admit of a certain rate of profits, being manifestly the opinion and habits of society, which as they determine the final or average proportion which shall be maintained between the numbers of the labouring population and the funds for their support, or in other words determine the average rate of Wages, so they also determine the average rate of Profits of Stock, which are only the wages of another description of labourers, consisting partly of the recompense of present labour exerted in the form of superintendence, and partly of the recompense of past labour exerted in the creation of their capital*. It would in fact be no

* For further illustration of this, see the "True Theory of Rent," Ninth

bad rule always to assume Adam Smith to be in the right, when his opponents let fall anything about "the fundamental principle with respect to the decreasing productiveness of the capital successively applied to the soil."

But, it will be said, if capitalists of all kinds, as for instance coach-makers, upholsterers, and glass-makers, would agree to increase their production at the same time and in the same degree, would not this enable the cloth-maker to have as good a coach, as many tables, and as much glass to set upon them, in return for his yards of cloth as ever, without troubling his head whether the money prices of these things continued the same or not? No; there is a fallacy something like that of the schoolboy who fancies pebbles might go for halfpence if only everybody would agree to take them. It is impossible that production *should* be equably increased in all kinds, however resolutely the capitalists were bent on the experiment; and not only would it not be increased equably, but in some most important articles, it would lag behind in a manner that would be immediate ruin to the scheme. If, for instance, all the manufacturers as above were to take into their heads to try to double their workshops and their workmen, they might proceed a little way in the pursuit, *but where would they get double the quantity of food?* Capitalists might set up two workshops, and make two coaches instead of one; but where would they get two landed estates, and make two crops of corn instead of one? The land is not there to be had; and if it is urged that they may apply their capital to the bad and rejected land, it is plain that this is only an indirect limit instead of a direct one. It is the bird tied to a spiral spring; which though it may gain a little by pulling, is in reality as much tied as another. The limit to the quantity of food, a limit always existing even where not brought nearer by unjust laws, is therefore what would bring the whole scheme to a halt. If this limit can be extended, as for instance by getting access to the food of foreign countries, or if the situation is supposed to be one in which good land may be occupied at pleasure—these are precisely the circumstances in which increase of production of all kinds may and will go on equably and without producing a competition that will prevent the expected profits. But if these circumstances do not exist, then the increase of production in some kinds, will find a limit through the impossiblity of a corresponding increase of production in some other kinds. It is likely that other things besides food, might be found con-

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Edition, p. 16 and elsewhere. Sold by Effingham Wilson, 13, Bishopsgate Street; price Threepence.

tributing to bring on the check; but food is the principal, and therefore it is sufficient for the argument. Here then appears to be the sore place, both of the theory which says "the most intense competition" could never produce a general fall of profits, and of that which says variations in wages, profits, and rent, cannot cause the value of commodities in the advanced stages of society to vary.

In the Note on the Effect of Variations in the Rates of Wages and Profits on the value of Commodities, all that is connected with allusions to the "fundamental principle" in the form of the "capital last applied to the land," &c. may be cut off as fallacious, except where the result accidentally accords with the result of substituting the general principle of monopoly price. For example, when it is said that "the giving up of rent by landlords would not enable raw produce to be obtained at a reduced price,"—this is true, not for any reason connected with "the portion of the necessary supply that is obtained by the agency of the capital last applied to the land," but simply because it could make no difference in the price of a limited quantity of produce, whether it was sold for the benefit of one set of men or of some other. And this reason would equally hold good, if a situation should be discovered where, either from ignorance or natural circumstances, there should be no such thing known as different qualities of soil, or increase of crops arising from laying out more money on the land. The insisting, therefore, on adhering to what is a mere accident, and representing it as the cause of the general result,—is like insisting that the king's coach was made to move because the horses were cream-coloured; and though the main fact asserted, namely that the coach has been drawn, may be undeniable, it is plain that such a mode of accounting for it must lead to error in the end.

On the Note on Money, it is apprehended, that though the results laid down are true, the reasoning by which they are supported does not go to the bottom of the question; and that a nearer approach to this is made in the place pointed out on occasion of a previous allusion to the subject of money. The part of the case which relates to Banking, and particularly to the question of the establishment of a National Bank, may be considered as having been discussed in the Article on the *Renewal of the Bank Charter* in the preceding Number of this Review*.

The Note on "Corn Laws and Corn Trade" contains exceedingly valuable matter; and perhaps the only objection that can

* See page 200 of the present Volume.

be raised to any portion of it,—with the exception of some allusions to that bane of political economists "the newly-employed capital," which however do not seem to affect the results,—is to the part near the conclusion, where an *ad valorem* duty of *seven* or *eight* per cent is spoken of as what the agriculturists might possibly justly claim "to indemnify them for peculiar charges." There can be no policy in indemnifying the agriculturists by a tax which deprives the public of several times the amount given to the favoured class, when there remains the incomparably cheaper plan of removing the supposed burthens from the agriculturists and laying them on somebody else. No man spends two shillings, as the means of indemnifying his neighbour for a balance of one; if his neighbour's claim is just, he pays the shilling.

The Section (1.) on the Effect of granting a Bounty on the Exportation of Corn, is peculiarly important. It is not certain that the author was aware of the value of the inference incidentally thrown out, that "bounties on exportation," and "restrictions on the importation of corn," have results of precisely the same kind; or of the high degree in which light is thrown on the operation of the Corn Laws by his discussions on a bounty.

'If the prices of corn in Britain and Spain were nearly on a level, no exportation from the one to the other would take place. But if, when prices were in this situation, a bounty, say of 10s. per quarter, were granted by our government, corn would be immediately poured from England into Spain. Limits would, it is true, be soon set to this exportation and importation. The competition which takes place among exporters, as among every other class of traders, prevents their realizing more than the common and ordinary profits of stock; and hence grain would be exported from England to Spain, not in the expectation of realizing the whole of the bounty as profit, but in the view merely of securing the ordinary rate of profit on the capital employed in its transfer. A rise of prices, though not to the whole extent of the bounty, would therefore be immediately felt in this country, and a corresponding fall in Spain. Nor would this rise and fall of price be temporary. Corn would be permanently reduced [*in price*] in Spain, [*not*] because the unusual cheapness of the foreign supplies would throw the poorest cultivated lands of that country out of tillage [*for the tendency of throwing any land out of tillage, so far as it goes, is to raise the price of corn and not to lower it; but because the increased quantity of corn arising from the cheap foreign supply would bring down the price of corn upon the whole, and this reduction would throw a certain quantity of poor land out of tillage, though to a much less amount than would reduce the whole supply of corn to the former magnitude*]; and it would be permanently raised in England, [*not*] because the increased demand would stimulate the bringing of poor lands under

cultivation [*but for causes the opposite of those which operate in Spain*]. A bounty, to the extent we have supposed, would perhaps depress prices 5s. a quarter in Spain, and raise them as much in Britain. To the Spaniards it would be extremely advantageous, as it would enable them to purchase the most indispensable necessary of life at so much less than they could otherwise have done; in Britain, however, its effects would be directly opposite. A few more of our heaths and bogs would indeed be cultivated, but every class of persons in the kingdom, landlords alone excepted, would find it more difficult to procure food than before. The higher price of our corn, supposing it not to raise wages and diminish the profits of stock, which it would most unquestionably do, would obviously be of no advantage to the public.'—IV. *p.* 334.

Here is presented a distinct vision of a rise of price in England, accompanied with benefit to the landlords, and with the cultivation of a few more heaths and bogs, which the landlords will not fail to hold forth as a matter of national exultation; but at the same time attended with a removal of corn, to a much greater amount than the produce of the said heaths and bogs, and an increased difficulty of procuring food, to everybody except the landlords. The sums the landlords gain, somebody else loses; and there is a loss to the community besides, of precisely the quantity of production, business, and employment, which would have been created by the expenditure of these sums in their proper places. And the same processes may be traced point by point in the case of a tax on importation.—It will not fail to be observed, that the insertions in italics are foreign to the author's text; and that the points therein controverted do not affect the final argument.

The commentator's statement of the operation of the English Corn Laws, is that the loss sustained by the public "may be fairly and moderately estimated at from *nineteen to twenty* millions" a-year, of which scarcely *one-fifth* "finds its way into the pockets of the landlords" after all; the rest being "absolutely and totally lost to the country, without contributing in the smallest degree to increase the comforts or enjoyments of any individual whatever." There certainly has been no instance in history, where two-thirds of a population, not avowedly slaves and under physical restraint accordingly, have submitted to such an infliction, to please the remaining third. The process will be brief, and ought to be. Either the fundholders and the church will join with the commercial interests and the rest of the public in putting down the enormity by legislation; or their possessions will be taken in the first instance either by the operation of legislation or otherwise, and afterwards will begin the attack on all property, hard enough

upon the innocent, but the inevitable consequence of the prodigious provocation. The outrageous injustice of the landlords is the key to the public danger, the spigot that confines the fermenting contents of the national beer-barrel, which must speedily burst if not relieved. If this were taken away, not all at once but by a moderately rapid progression, the debt and taxation would be made a flea-bite, not by removing them, but by increasing the ability to bear them, which comes to the same thing. The public irritation would fall, as the fierceness of a den of hungry savages might be lulled by the application of joints of meat; and there would be a great calm. It seems impossible that before the mischief goes much further, a government should not arise, possessing about as much prudence and decision as might be competent to the regulation of a regimental hospital, and by speaking the truth and rallying the parties concerned, cut off the progress of the evil by cutting off its source. In which hope, the policy at present would seem to be, to endeavour to accelerate the crisis; as surgeons promote inflammation which is to terminate in cure.

The "Navigation Laws" were the restrictive fallacy applied to shipping. To please the English ship-owners, the consumer of a foreign commodity was to lose all the difference between their inferior skill in their craft, and the skill of anybody else who might be superior; and some class of English traders with whom the difference would have been spent, was to lose the amount over again besides. They were an Act to enable ship-owners to put twenty shillings into their own pocket by taking forty from the community. It is grievous to think, they should have been invented by republicans; but it is some consolation, that the dynasty of harlots which succeeded was no wiser.

The only plea which in the present day could hold an hour against the examination of reasonable men, is that which maintained they were for *Defence*. The representation was, that the object was to increase the number of mercantile sailors, and that the sailors were essential to the safety of the country. The answer to this is, first, that a sailor, like everything else, may be bought too dear; and secondly, that the practice of making the defence of the country habitually dependent on the accumulation of merchant seamen at double their commercial value, is as rude and inartificial, as it would be to enact that every horse should have two drivers, for the purpose of securing the power of increasing the corps of artillery-drivers with men expert in the vocation. The folly may not be so glaring; but it is of the same kind. If the artillery were to propose such an enactment, they would be told to train drivers for themselves.

But it is easier for an aristocratically governed navy, to kidnap sailors than to make them; and like other kidnappers, they prefer that their game should be thick. Nothing but the contemptible inability of the English people to preserve themselves from gross personal oppression on the part of the aristocracy, could have continued the brutal practice of impressment. A sailor, too, acts at a disadvantage compared with other men. He is insulated by his vocation, and may be oppressed with comparative safety; while if the proposal were made to oppress bricklayers' labourers, it would cause a general appeal to the only substantial security a people has against an aristocracy, resistance. The bricklayer has the advantage of being a land-animal; and the consequence is, that sailors are subjected, not only to the privation of the personal freedom of which their countrymen make their sneaking boast, but to an abiding state of misgovernment in the ordinary pursuit of their vocation, of which nobody that has not seen it can form a competent idea. Now and then some tyrant who to ordinary wickedness unites extraordinary folly, finds his way into the newspapers in spite of all that can be done for his assistance; and this is nearly all the redress a sailor has.

The whole of the Note on "Impressment" may be taken as a text-book by any person wishing to be master of the subject. Its conclusion is particularly forcible and true. Unless means are previously taken to remove the cause of complaint, the sailors, if they are wise, will on the first breaking out of war, go over to America in a body; and it has been avowed that an understanding to that effect has been extensively circulated among them. The first principle of a free government, is that oppression cancels all duties; and it *is* the first principle, because to this alone the existence of any freedom upon earth is traceable.

Of the "Colonial System" the only remains, since the alterations in the Navigation Laws, consist in the duties levied on goods of the same kind as produced in the favoured colonies, from foreign countries, and sometimes from dependencies of the same country. Of the first kind is the tax on Norway deals; of the second is the degrading tax on sugar, imposed for the abstract love of slavery felt by the gone-by government, and the interest acknowledged in maintaining it for its reflex effects on the community at home. A people that pays a poll-tax for the support of slavery, is manifestly but a remove from slavery itself; it is therefore nothing surprising, that a government whose basis was the public wrong, should have supported the outpost of slavery in the colonies at all hazards. For all that is thus given to the slave-holders, it is clear the people of

England pay twice; once in the loss to the consumers, and once more in the loss to the traders on whom the difference in a state of freedom would be spent. It is not a proposition to be minced, but one to be brought forward with the gravity of a theorem in Euclid,—that if the West Indies were by a convulsion of nature to sink into the sea, the commercial and political advantages to the British community would be enormous, incalculable; and the gain in a moral and domestic point of view, would be that of the cessation of a tribute, in comparison of which any that was ever paid by a nation to a conqueror, was honour and positive renown. No man has a right to demand of another, that he shall degrade himself by pretending ignorance, that if such a consummation should be in the page of destiny, all the employment to trade, navigation, or manufactures of any kind, which might thereby be caused to cease, would be replaced by a *greater* extent of trade, navigation, or manufactures, arising with the country whose cheaper produce is now prohibited by the delegates of the slave-holders in the House of Commons;—with the single reservation, that places should be lacking in the world from which the same supply could be procured. But this reservation can have no bearing on the effects of removing from us the present slavery-tax on sugar. Either such removal will cause the whole supply of sugar to be increased, or it will not. If it does, there is an end of the threat of an insufficient supply. If it does not, the public will be where it is, and will be under the necessity of giving the same prices for sugars of all kinds as at present; and so the West-Indians will go on. The pretence, therefore, that the public would lack a supply of sugar, is only for knaves to frighten children with. The truth is, the government has loved slavery and the support of slave-holders; and for this predilection of the government, we the slaves at second-hand, must pay.

The Note on the "Commercial Treaty with France in 1786," has the appearance of having been written some time since, and having received the benefit of the author's later knowledge, without all the expressions being removed which have the air of running counter to it. Thus it talks of a "fair principle of reciprocity," and "all really beneficial commercial transactions being founded on a fair principle of reciprocity," as if the author believed "reciprocity" had anything to do with the common-sense of the affair. Yet nothing can be clearer than the paragraph in which he puts down the foolish fallacy that we should wait for reciprocity.

'The disinclination of foreign governments to enter into commer-

cial treaties on a footing of reciprocity, has sometimes been urged as a reason why we should not admit the commodities of their subjects into our markets. But a regard to their own interest will always induce those who consider the matter dispassionately to purchase whatever commodities they want in the cheapest and best market. It is true that the French government have, by an unwise and most impolitic regulation, prevented the introduction of English cottons and hardware into France; and have thus forced their own subjects to misemploy a large proportion of their capital, and to purchase inferior articles at a higher price than that for which they might otherwise obtain them. But this is a line of conduct that ought to be carefully avoided, not followed. The fact that a foreign government has done an injury to its subjects by making them pay an artificially enhanced price for their cottons and hardware, can be no apology for the government of this country injuring those entitled to its protection by making them pay an enhanced price for their wines, brandies, and silks. To act thus, is not to retaliate on the French, but on yourselves.'—IV. *p.* 417.

The "Petition of the Merchants of London for a Free Trade" in 1820, is a consoling document; particularly when connected with the subsequent virtual abrogation of the Navigation Laws. It is consoling because it gives a high idea of what has been accomplished, and an earnest of the future.

On the subject of "Commercial Revulsions," it is important to notice, that by far the greater part of the phænomenon arises out of the system of protection. Men are supported in a trade by making other men pay for what they do not want, and when the wretched system fails, as fail it must, there is proclaimed to be a Commercial Revulsion. If the system of protection had never been, honest commerce would have taken its course silently, and capital and employment would have been attracted to one trade and drawn off gradually from another, as the changes in the world and human wants required. And another point still more urgent in the actual condition of things, is the insisting on the principle, that if any of the artificially cockered interests give substantial evidence of suffering from physical want, *the evil should be met by a direct gift of money on the part of the community*, and not in a way which levies the sum twice over, once from the consumers and once over again from some other class of British traders with whom those consumers would have spent the money. Every class which presents itself with a demand for relief through the medium of "protection," ought to be considered as saying, "Forasmuch as nobody wants the goods we make, we beg that some other class of traders may be robbed to serve us, and the consumers over again besides."

The case of the "Herring Fishery" is reducible to the same

principle as other commercial frauds. To put an extra price into the pockets of certain herring-fishers and the capitalists who employ them, we take it twice over, first from the eaters of herrings, and secondly from those traders with whom the money would have been expended. The argument of ancestorial wisdom is, that neither the eaters nor the traders form a compact mass. The principle therefore is like one which should allow the herring-fishers to raise a sum by collecting half-pence on the highway, with the additional special condition that half the halfpence should be thrown into the sea.

The Note on the "Disposal of Property by Will" is too favourable to what it calls "the custom of primogeniture." It omits the principal circumstance connected with its effects in this country; which is, that it makes part of a regularly organized system, for concentrating the wealth of the family in the senior member, with the view of making it an engine in his hands for effecting the maintenance of the junior branches through the medium of the public wrong.

Of the "Government, Revenue, and Commerce of India" as at present conducted, with its adjunct the China Trade, the principal feature may be stated to be, that it is a commercial fraud of the same nature as the Herring Fishery; except that the plunder instead of being collected from old women who eat herrings, is collected from old women who drink tea, and that the enjoyers sail in twelve-hundred-ton ships instead of herring-busses, and go to India to fetch it. In both cases the amount gained is taken twice over from somebody else; once from the old women, and once more from the people who would have had their custom if it had not been laid out where it is.

In the Note on "Taxes on the Rent of Land," the charge against Adam Smith amounts to his having said that taxes on Rent would fall on the landlords, without noting that such taxes could not sweep away the portion of the rent of a farm which consists of the interest of capital expended on improvements or buildings. The answer to which appears to be, that Adam Smith would have called one Rent, and the other the Interest of Capital.

The Note on "Taxes on Profits" declares that Adam Smith is wrong in saying such taxes fall ultimately on the consumers; and that this is only true when the tax is laid on the profits of "one or a few businesses." A presumption of the inaccuracy of this, is in the difficulty of assigning the point where "a few businesses" are to merge into enough to produce the general effect. The error may be suspected to lie in the reasoning about the "*real* value;" the truth apparently being, that when a tax is imposed on the profits of any particular business or species of capital, the parties concerned reduce the *quantity* of

their business or capital, till what is left pays them the ordinary rate of profits as before. If any of them remove capital to other employments, they will either not succeed in establishing it, or drive out a corresponding quantity of the capital of less able and fortunate dealers somewhere else. And the same process will be repeated, if the tax be extended to *all* profits. The final consequence of which will be, that in addition to the tax being ultimately paid by the consumers, there will be a reduction to the amount of the tax, of the commodities sold and consumed within the country*.

From this results the very important proposition, that a tax on manufactured goods, is analogous in impolicy to the attempt at raising money for a favoured class by restrictions; and for the same reason, namely that there is a *double incidence*, or the amount is lost twice over. The tax is paid once by the consumers, and there is a gratuitous loss to an equal amount on the capitalists and labourers besides; this last gratuitous loss being measured by, and in fact identical with, the losses arising to the manufacturing capitalists and labourers from the diminution of the extent of their business. This fact will make a powerful demand on the public attention, whenever the public has got through a few of the subjects whose pressure is more immediate.

The Note on "Taxes on Wages" is exposed to the same objections as that on Taxes on Profits. The cases of Wages and of Profits are in fact the same; profits being only the wages of a particular kind of labour, and the absolute magnitude of both being settled in the same way, by the opinion and habits of society.

The Note on "Taxes on Raw Produce" exhibits a retreating from the Ricardo fallacy on Tithes. It in fact gives up the general assertion "that tithes fall on the consumer," which was precisely the point where the error of what was put forward as the new theory of rent became distinctly ostensible by the consequences; and confines itself to contending that the opponents of that opinion have not assigned sufficient magnitude to the loss which they maintained to fall on the consumer in consequence of the existence of different qualities of soil.

The Note on "Taxes on Commodities" sets out with a clear insight into the very point that was defective in the case of taxes on profits,—namely, the certainty that the dealers in the article taxed will be "forced to contract their business, and by lessening the supply, raise the price to such as will yield the common and ordinary rate of profit." But it is followed by an

* For an extended examination of this, see "True Theory of Rent," Ninth Edition, p. 18.

effort to confine this to the case of *luxuries*. What are luxuries? Salt is a luxury, to the man who is obliged to eat his potatoes without. This part of the argument is in fact a portion of the principles formerly contested in the cases of Taxes on Profit, and on Wages. The truth with respect to taxes on commodities not produced under a monopoly, whether luxuries or not, and whether the duty be laid *ad valorem* on all or in any other manner, appears to be that the price is raised till the tax is paid by the consumers, but there is at the same time a diminution of the whole production, consumption, and employment of the community, to the amount of the tax over again.

The researches on the "Funding System" point mainly to the conclusion, that when all a nation's disposable income has been absorbed by the interest of debt, the only chance left is to outgrow the debt by removing checks upon the industry of the community, if it is lucky enough to have any. Of luck of this description, our own has no deficiency.

The "Additional Note on Rent" is amusing by the *bonhommie* of the assertion, extracted from a writer of as early date as 1801, that "Rent is, in fact, nothing else than a simple and ingenious contrivance, for equalizing the profits to be drawn from fields of different degrees of fertility." Nevertheless the same writer's ideas are not far from the truth on the nature of effective demand, and its connexion with the price. It is not exactly that men say "We must and will have such a quantity of corn whatever we may pay for it." But they raise the price which they will bid for corn, and at the same time economize its use in all the ways they can discover, till at last they agree upon a division which will make the existing supply hold out; the increase of price encourages increase of supply in future, and by the repetition of the process and its opposite, the price and the supply are made continually to meet. With the exception, however, of the odd imagination alluded to, the extract is far from being a bad account of the origin of Rent.

It is very clear on the whole, that the commentator has got at least half-way out of the Ricardo fallacy on Rent; but he is loth to acknowledge the fact, and tries all turns to persuade the reader that he was never so far wrong as might be thought. He would do better to apply his influence and his talents, to display the full extent of the mistake. Another request which may reasonably be urged, is, that after having let down the question of Absenteeism by advancing a demonstration before parliament which burst in the proof, he would either support what others have produced in the way of a *probes aliter* on the same point, or put forward something better of his own.

WESTMINSTER REVIEW, 1 October, 1832.

ART. IV.—*The Music of Nature; or, An Attempt to prove that what is passionate and pleasing in the Art of Singing, Speaking, and Performing upon Musical Instruments, is derived from the Sounds of the Animated World. With curious and interesting Illustrations.* By William Gardiner.—London; Longman. Leicester; Combe and Son, Cockshaw. 1832. 8vo. pp. 530.

THIS is the common-place book of an amateur who rejoices in the recollection of having played a violin at the Commemoration of Handel in 1784. In a musical sense it is *de omni scibili, cum quibusdam aliis*; and the intention here is to go through it in the same disorderly order as it is written, for the chance of making any remarks that may tend to promote "the greatest happiness" in the department of sweet sounds.

And first,

'There is a marked distinction between noise and musical sound.'—*p.* 12.

What the origin of the difference may be, it is useful to try to ascertain. The author has probably aimed at the right place, in saying that "noise is a confused mixture of sounds;" though that it is produced by the "concussion of non-elastic bodies," may require to be explained away. It is difficult to understand how any sound can be produced from non-elastic bodies. *Musical* sound is manifestly the result of equable vibrations; and in proportion as these vibrations are unmixed, is the clearness of the tone. A certain degree of prolongation is also necessary to musical effect; for if the sound is rapidly put an end to, the consciousness of its musical tone is at all events greatly diminished. Hence the probability is that unmusical sound arises principally from two causes, speedy cessation producing the effect of abruptness, and mixture. If all the keys of a pianoforte are struck at once, something is produced very much like a crash; and if the notes were increased in number and diminished in interval, and moreover the whole made abruptly to cease, it is probable that any degree of approximation to the most unmusical sound in existence, might be attained that could reasonably be desired. The use of all which, if it be true, is to establish the simplicity of nature, and pull down anything like blind astonishment at the existence of musical sounds.

Nevertheless the circumstances which affect the quality of musical sound, are often such as it is difficult to account for. The following observations will be interesting to the utilitarians in violins.

'The violins made at Cremona about the year 1660 are superior in tone to any of a later date, age seeming to dispossess them of their

noisy qualities, and leaving nothing but the pure tone. If a modern violin is played by the side of one of these instruments, it will appear much the loudest of the two, but on receding 100 paces, when compared with the *Amati*, it will be scarcely heard.'

'When Barthelemon led the Opera, connoisseurs would go into the gallery to hear the effect of his Cremona violin, which at this distance predominated greatly above all the other instruments; though in the orchestra it was not perceptibly louder than any of the rest.'—*p.* 12.

'The violin had its origin in Italy, about the year 1600; but those which are esteemed of the greatest value were made at a later period, about 1650, at Cremona, by the family of A. and J. Amati, and their contemporary Stradvarius, of the same place. These instruments are found to be very much superior to any that have been made since that time, which acknowledged excellence is chiefly attributed to their age. The Amati is rather smaller in size than the violins of the present day, and is easily recognized by its peculiar sweetness of tone. The Stradivari is larger and louder; and is so highly esteemed, that many have been sold for the sum of two hundred guineas.'—*p.* 205.

Since *tone* is so highly paid for, it is strange that greater efforts have not been made for its improvement. A guitar that was fitted with a tail-piece in the manner of a violin, had its tone entirely ruined; which may be supposed attributable to the weight and volume of the incumbrance. When the strings were fastened to pegs at the back of the instrument, the strength of tone was greatly increased*; but there arose the inconvenience, that in consequence of the elasticity of the parts behind the bridge, the strings were never steady in tune. Possibly on the violin the advantage might be obtained without the evil, by fastening each string to a piece of hardened steel wire which should reach from the back of the instrument to near the bridge. Col. Macdonald, in his treatise cited in a former Article†, has suggested the removal of the tail-piece, but has not noticed the evil which ensued.

It is remarkable that the following observations on the language of the modern Greeks, should make their appearance *viâ* America and a book on music.

'Mr. Pinkerton, in an essay on this subject, in the Memoirs of the American Academy, observes, that he had formerly adopted the very prevalent opinion, that the pronunciation of the modern Greeks was grossly corrupt; but that in the investigation of the subject, which he

* It was observable that the tone was further improved by putting a piece of leather between the strings and the edge of the back on which they pressed. This probably acted by checking some vibration in the strings behind the bridge; as may be concluded to be the object of the strip of cloth interlaced among the strings, behind the bridge, in pianofortes.

† Article *Enharmonic of the Ancients.* See page 133 of the present Volume, Note †.

was led to make in consequence of conversations with individuals of the nation, he had found strong reasons for changing his opinion. He now thinks it in the highest degree probable, that the Greeks of the present day pronounce very nearly as their ancestors did, as early as the commencement of the Christian era.'—*North American Review*, No. LVII.—Music of Nature, *p.* 36.

How far "the true principles of musical taste and expression" depend on imitation, is a question which, as the author has admitted in his Preface, "may excite much controversy." The inference from a general view perhaps is, that it is partially true, and only partially; and that it is not in zeal for imitation, that the actual music is deficient. Few people have listened to much music, without being invited to the exercise of laughter, by the matter-of-fact manner in which musicians apply themselves, now to hum as flies, anon to murmur as waters, and afterwards to whisper as the evening breeze. And equally few have failed to come to the conclusion, that these were coarse and inefficient efforts,—rude practical attempts at effect, like his who brought seven fatherless children on the stage by way of forming the pathetic;—and that music is in reality something more subtle, or at all events less mechanical than this. The "Battle of Prague" is imitative; but the "Battle of Prague" is not of a high order of music. The earliest impressions made on children by music, are probably in a great proportion of cases received either from the warbling of nurses, or the services of the cathedral or conventicle; and it may fairly be asserted that the effect is not produced because what is heard is *like* anything in heaven or earth. That in after life there is some connexion between the sounds of music and the tones in which human beings, and perhaps other animals, express certain feelings, is also not to be denied; there is some community of source. But the community after all is only remote; and there is more danger of making too much of it, than too little. If a Swiss soldier is moved to a rapture of desertion by an imitation of a cow-horn, it is not because it is music, but because it is like a cow-horn. A miller recruit might be roused to the same feeling by the imitation of a mill-clack. All attempts at improving music by the gross imitation of material objects, have been failures; from the piping nightingale of the stage, to the idea of Napoleon's band-master of a discharge of cannon for a military *fortissimo*. The efforts of practical musicians to obtain effect by accumulation of noise, have been equally unsuccessful. It is probable that the elderly gentlemen who fell into fits at the Commemoration of Handel, would have done the same on a saluting-day at Spithead. Music is not noise but "concord of sweet sounds." If anybody insists on prying into

the materials out of which the result is made, it may be proved that as a living Venus is made up of certain proportions of skin and bone and muscle, so musical effect is dependent on certain proportions between the velocities with which different substances vibrate. Why the combinations or sequences of certain sounds should excite particular emotions in the hearer, is a question of the same kind as why certain arrangements of lips and eyes should produce beauty. It is much easier to ascertain the fact, than the immediate cause. But in neither case does the effect seem to depend mainly, if at all, on imitation. There may possibly be instances in which a reference to early associations in a certain degree affects the decision; but no reason is shown for believing that this is either the whole, or an important fraction, of the cause.

The human voice is undoubtedly the most perfect of musical instruments; not *merely* because it can imitate the tones of ordinary life, though this may go for something,—but because a good specimen of the human voice combines more varieties of power than any other instrument, aided by the fact that there is much more immediate and delicate connexion with the will of the performer, than can be achieved in any modification of wood, or wire, or reed, or catgut. The ostensible difference between singing and speaking, is, that the first proceeds by the intervals produced by dividing a string in the simple ratios, and the other does not. The grace called a Slide or *portamento* introduces an occasional approximation to what takes place in speaking, and speakers do undoubtedly frequently rest upon musical intervals; but neither of these seems to destroy the main fact, that we may have all our lives discoursed in *portamento* and sung in intervals.

It is not to be doubted, that there have been good vocal performers. But there is nothing incredible in the surmise, that posterity may look back on the present time, in something the same manner that the present looks back on the stage as it stood before Garrick's reformation. It is difficult, if not impossible, to imagine anything more powerful than Mrs. Siddons's representation of Lady Macbeth. It is very easy to imagine something more powerful than Madame Pasta's execution of *Deh! calma, O ciel*, though the composer has contributed all the materials for scenic effect. It may be heresy, but all the good in the world comes by heresy;—there will be a new style, which shall give to serious singing, exactly what constituted the difference between the tragedy of Siddons or of Talma, and the tragedy which occupied the place before those suns had risen. Trills too, and bravuras, will be shelfed with Mandane's hoop and Alexander's wig; the coming age will as

lief see a performer try how long he can hold his head in a pail of water, as either.

There appears room for profitable inquiry, on the subject of "Accent." One of the writers on music in the Encyclopædias, in general individuals of eminence in their art, has fallen into the error of speaking slightingly of the performers on that ancient and stirring instrument the drum, for talking of performing "sonatas" on what in the commendable pride of their hearts some of the fraternity have termed their "parchment fiddle." Now the fact was a thing to be thankful for, and not to mock at; for what the drummers had done, was to exert themselves to display the powers of a particular branch of musical expression, and demonstrate them stripped of connexion with the rest, in the same manner as anatomical plates exhibit the muscles by sets, till they arrive at the skeleton which is the sustainer of the whole. Instead of mocking, a musical philosopher should have caught at the opportunity to authenticate the degree in which accent unassisted by either melody or harmony can be the source of musical effects; with a view to ascertain and improve its application in aid of the others. And the tendency of such an inquiry would be to prove, that Music may claim Accent as the instrument of at least *quinta pars sui nectaris*, and that light may be thrown on the anatomy of its construction.

And here there may be a dispute in the outset, on the application of terms. What is the precise term for the quality by which a drummer,—and more markedly still, a native beating "many a winding bout" in the stillness of an African night though his machinery be only a board and two sticks,—excites the idea of measure and of music? It is not merely the succession of sounds at particular intervals; a principal part of the effect arises from the cunning increasing or diminishing of the strength of sounds in particular places of the general rhythm. To this it is that the term "variety of accent" seems to be properly applied; and as words have generally one or two secondary meanings slightly removed from the primary, so Accent is sometimes used to denote the whole system of what is more rigidly expressed by "variety of accent," and sometimes for those particular portions of the system to which the loudest sound is given, or on which in the language of the author a "stress or force is put."

'In the following strain, the character and meaning of the music will entirely depend upon which note the stress or accent falls [on]. By being placed upon the first of every four, the movement is thrown into common time; but when placed upon the first of every three, into triple; although the notes are precisely the same. [Here follow

two lines of notes, which, through mistake it must be supposed, are *not* the same]. The ear takes no pleasure in listening to a succession of unaccented or monotonous sounds: so far from stimulating its attention, it tires and grows weary with the uniformity. From the peculiar structure of the ear, we learn that the different degrees of loud and soft constitute one of its greatest pleasures, and that it is unfitted to receive two sounds of equal force in succession. [*It would probably have been better to say, that two such sounds, in ordinary circumstances, produce no pleasing effect.*] An accented sound invariably robs the following one of its energy; and this is natural,—for after the weight of voice has been thrown upon the accented note, the following is uttered under a degree of exhaustion, and consequently is rendered weaker. [*Something better might have been said than this. The note which has less force is as important and meritorious a member as that which has more.*] When the accent is removed from the first note of the bar to the second or fourth, it is called a *false accent*. This, by disturbing the rhythm, imparts a peculiar movement to the strain, upon which depend its leading features and character, as instanced in national airs, the polonaise, and the waltz, &c. Haydn, by this means, will convert a few bars of triple time into common, in the middle of a movement, with a capricious effect.'

'It has been observed that the walking pace of a man is in common time, and that armies are always moved in this measure. [*Nature decreed it when she made man's two legs of the same length. A cripple moves in* § *time.*] But in Venice, where the people are constantly moving upon the water, the motion of the boat [*or rather, the sound of the oars, which say distinctly "One—Two—Three—" with a different tone and accent upon each,*] suggests the flowing ease of triple time, in which all their celebrated airs and barcarolles are written. Rousseau informs us, that these airs are composed and sung by the gondoliers, and have so much melody and an accent so pleasing, that there is no musician in Italy but piques himself on knowing and singing them. The liberty that the gondoliers have of visiting all the theatres gratis, gives them an opportunity of forming an ear to all the niceties of music and a correct taste.'—*p.* 184.

As the preservation of measure or time is one great source of musical pleasure, so the undulation of sounds in different degrees of strength, especially when also connected with measure, is found to be another. The undulation of sounds in musical time is an improvement and enhancement of the pleasure received from musical time *simpliciter;* the last is the outline, and the other the portrait filled up.

The most palpable distinctions of time are into *even* and *triple;* or those where the bar or marked division of the measure is divisible into *two* members, and into *three.* It is not impossible to imagine music composed of five, or seven, notes of equal length in the bar; and it is believed that some such has been written, at least of the first kind. On experiment it

is not difficult to form notes in such a metre into something like a wild waltz; and by joining several of the notes into one, an effect is produced which is not unfamiliar in the practice of the trumpet and bugle. But the great reason why metres of this kind are not used, is probably because they produce no very marked result, or none that is not as well produced by employing the multiples of two or of three. All the multiples of either of these; by itself or by the other, may be said to be in use; though they are considered, not perhaps with perfect accuracy, as all included in the two classes of *even* and *triple* time.

The first remark that may be made on these species of time, is that in even time each bar, however multitudinous the notes that may be inserted in it, is divisible into two portions of very distinguishable degrees of force or loudness, and in triple time into three. It may be a question whether the divisions may not be more; but in the first place they certainly are these. In common time the first and last portions of the bar have the respective characters which it is common to describe by the titles of masculine and feminine, as indicative the one of strength and the other of grace; and thus the two halves proceed

> "Like those sweet birds that fly together,
> Link'd by a hook and eye."

The beginning of the first half is marked by a peculiar degree of what is often exclusively called the "accent;" and there probably is, or ought to be, an almost imperceptibly small degree of the same on the beginning of the second. In triple time, the bar is divisible with equal distinctness into three portions, each falling below the other in loudness; so that if a stranger should be introduced suddenly into hearing of the sounds, there would be no possibility of his mistaking the beginning of the bar. One consequence of this is, that the triple time is more susceptible of variety than the other; and its superiority in this respect will, it is apprehended, by most hearers be recognized.

But this is only the outline, and the inquiry may be pushed much further in several directions. Whoever has been rocked in a boat upon what in plain prose may be called the "ocean waves," will have been conscious that besides the petty furrows which lifted its head and stern alternately in a time approaching to the vibrations of a church pendulum, there was a larger swell of which the others were but inconsiderable parts, and even a mightier still, of which this second was but a limb and portion. Something like this appears to be the nature of the undulations of musical notes; there is a great swell and a little

one, and both of them contribute to the general effect. The examination may therefore on this principle be conducted in two directions; first, to inquire what quantity of minor undulations may be within the compass of a bar,—and secondly, to ask whether bars themselves may not be fractions of greater undulations, and whether out of these again may not be constituted undulations of higher orders in succession, to an extent that can only be measured by the skill of the performer, and probably also by the cultivated sensitiveness of the hearer. Any person who will attend critically to the execution of superior instrumental performers, will be surprised to find to what an extent this species of "linked sweetness" may be traced, and how large a number of bars may be formed into a connected whole, by means of the relations of what is here termed accent. A desire to direct effects of this kind by signs, was evidently the origin of the multitudinous *fortes* and *pianos* which present themselves in some old music.

As one of the most reasonable steps towards the attainment of execution is to know the rationale of the effect aimed at, it can hardly be denied that investigations of this nature tend to improvement. At the same time there are always two factions in every art; one which cultivates mystery under the pretence of genius, and the other which resolves mystery into its component parts when able, and trusts to genius for what may resist solution after all.

As is noted by the author of the work, there are sometimes *false accents*, employed for the purpose of imparting a peculiar effect. And there are occasionally passages in which all the notes are brought nearly to an equality in point of accent, producing a result akin to something that may be recognized in trumpet blasts, with a portion of the expression aimed at by the term *maestoso*. Cadences also, which as noted in p. 184 are used to make a break or separation for the purpose of introducing a change of subject, frequently affect a nullity of accent, producing a musical-snuff-box-like effect, highly favourable for leaving the ear unoccupied for any measure which may follow. But all these may be considered as exceptions, and form no objection to the other being the rule.

Attention to such principles of accent, may solve what would otherwise present themselves as musical difficulties. For example, very lame answers are to be found in some works of repute, to the question of what would be the difference between the same music played in what is called *Common time* of four crotchets in a bar, and in what is marked $\frac{2}{4}$. In which the consequence would evidently be, that by the last mode of division the number of leading accents would be doubled; a circum-

stance either the introduction or omission of which may by possibility have serious effects upon the character of the performance. Again, if it is asked what is the difference between the times marked $\frac{6}{8}$, and $\frac{3}{4}$;—the first is an even time as regards the divisions of the whole bar, but the subdivisions of these are into triple; while in the last the converse is the case. And this may solve a difficulty often felt by beginners, who when they find six quavers joined by one line at top or bottom in a bar, are at a loss whether they should be accented by threes together, or by twos; of which the solution seems to be, that if the music is written in $\frac{6}{8}$ time they should be accented by threes, and if in $\frac{3}{4}$ by twos. Waltzes, for example, are almost always in $\frac{3}{4}$ time, and jigs in $\frac{6}{8}$; and it does not require much acumen, to be sensible of the difference of character between a waltz and a jig. A further question might be raised, of whether it is not possible for an air, for instance, in Common time (or four crotchets, which is the *commonest* of the even), to have the undulations made by its successive bars, in triple time; or contrarywise, bars in triple time to have their undulations among each other in even. The instance of $\frac{6}{8}$ time, where, as formerly noted, the bar is divisible into two, but these divisions again into three, appears to present an analogy on this point. These however are speculations showing rather what might possibly be reduced to system, than what anybody has done; though it is not unlikely that superior performers take the benefit of the facts without knowing it.

Attempts of this kind at analysing musical effects may be considered trifling, or may be voted mechanical by such as desire to believe every grace "beyond the reach of art;" but they are advanced here with more confidence, from the certainty that a *quasi* pupil on whom they were experimented, made rapid advances in a branch of musical expression which is generally the result of long practice, and is often considered as the gift of nature rather than of instruction. There is no reason for being afraid there shall not be everywhere enough left for nature after all; but it is good to compass a point by instruction where it can be done.

The concluding paragraph of the author's Section on Accent, is faulty inasmuch as the subject of it is manifestly not accent, but *tone* or quality of sound.

The Section on "Colour" is puzzling. He that can receive it, let him receive it. It is clearly possible for a musician to associate the ideas of particular kinds of tone or quality of sound, with particular colours, and to communicate these associations to others. And further, it is not impossible, that these associations when they become common stock, may be conveniently

employed to express the presence or absence of certain of the qualities in question. For example, if it be determined to call the Trombone deep red, and the Oboe yellow, there is no difficulty in conceiving that the Clarionet may be described as orange, or the Bassoon, which is a gruff oboe, as deep yellow. It may perhaps be more natural to call the Flute sky-blue, than the Double Bass; but there is still something visionary in the comparison. There may be a gentle colour and a gentle sound; but after all, the resemblance is like the river at Monmouth and river in Macedon, which had "salmons in both." A lady who read this Section, declared that in childhood she always strongly attached the idea of colour to *names*, and could never think of Anne but as pink, Elizabeth purple, and Lucy light blue. Charles she thought was red, Thomas blue, William yellowish green, Edward brown, Francis the colour of red hair, and Peter pepper-and-salt. Associations of this nature appear to be characteristic of tender age, and may be held to be of the kind which it is rather the office of philosophy to dissolve than to impress.

The illustration taken from the Sinfonia in the "*Creation*" (p. 191) is resolvable into other elements than colour. There is as strong an analogy as can well exist among things not absolutely homogeneous, between a succession of sounds beginning with the scarcely discernible, and receiving gradual accessions till they arrive at the greatest fullness of which they are capable,—and the self-same process, *mutatis mutandis*, transferred to rays of light. It is certain that the sun has risen nightly at Covent Garden for many years, to a symphony where this analogy is distinctly preceptible. It is not known with clearness whether it is the precise Sinfonia mentioned above; but it is rather believed it is.

Where did Madame De Staël get her information, that crocodiles imitate the cry of children so perfectly, as to allure and entrap their mothers? Stories of crocodiles are from Egypt; and the Egyptian crocodile entraps nobody. The French army were in the water every day, and there was no instance of a soldier being molested by a crocodile. Possibly the other was before the march of intellect reached crocodiles; which in our days has made "dogs in this country bark more and fight less than formerly" (p. 199). It is certain dogs are a reformed generation; but it may be doubted whether it has not been principally brought about, by sending the recusants *à la lanterne*.

The author is perhaps the first musical writer, who has remarked the horrible notes of the mule. They undeniably are sufficient warrant for the Levitical prohibition. He begins with an attempt to bray, like the father that begat him; when all

his mother rises in his throat, and he dwindles into as awful a caricature of neighing, as Frankenstein's man was of humanity. The two parents seem to divide his larynx, with most unfortunate precision.

The Note on the Violin in p. 205 falls into an error on the subject of the Guitar.

'The frets upon a viol were narrow ridges of wood, just raised above the finger-board, crossing it at right angles, and were so placed, that the finger casually falling between the frets, the string was stopped in tune. *In the guitar they still remain as a guide to ignorance, and an impediment to taste and expression.*'

Now the fact is, that the guitar being intended for the most part to play a trio and often a sextett, the frets are essential to the execution of these purposes. The way to settle the question, would be to try how much could be executed on a guitar without frets. The objection therefore seems as untenable, as to blame an organist for having his pipes of fixed sounds, instead of tuning each as he goes, by the action of his hands, in the manner of the tube of a sackbut. But as the guitar was the oldest instrument, its frets were naturally enough in the first instance transferred to the viol and its kindred; though the necessity for them was not the same, inasmuch as all idea of sounding more than at the utmost two notes at once, was given up by the introduction of the bow.

It is rather hard that after commemorating everything that squeaks, or squalls, or hums through the nose, no other mention should have been made of the descendant of the cithara of the ancients, the lute of our well-favoured ancestresses. A murrain on the man who hath no leaning towards gentle antiquity! If instruments were estimated by their effect divided by their magnitude, the guitar with its hundred tones would hold considerable rank. But musicians love to come forth, and call upon their gods; and think scorn to commune with an instrument that brings an orchestra to every man's hearth for about the cost of an alderman's dinner. It is true its scale is not absolutely the purest; for it is that division of the octave into twelve equal intervals, which was the subject of great expectation with musicians while it was thought difficult and rare*.

* The way in which the guitar-maker divides the scale of an instrument whatever be the size, is of extreme simplicity. He uses what he calls a *compass of division;* being a pair of compasses of wood, but with the legs prolonged on the other side of the pivot, as would be done to make a pair of pincers; and the four points are tipped with iron. The two short legs are each an inch long, and the others (to the nearest sixteenth) seventeen inches and thirteen-sixteenths; (the true proportion, to five places of decimals, being that of 17·81718 to 1). He takes the distance from the nut to the bridge, in the long legs of his compasses, and then with the short legs marks off from the nut the place of the first fret; he takes the distance from this fret to the bridge, in the long legs as

But this is of small import in an age which finds beauties in untuneableness, and believes exact intonation would be an evil and a loss. Its intonation is in some keys inferior to the pianoforte's; but the pianoforte cannot warble, or articulate, or sigh, or wail, or tremble like the human voice under emotion, as the guitar; it cannot effect that oblivion of worldly ills, which a philosopher said was produced on him by a moonlight night, and Lord ———— by Vestris' ancle. It may be assumed that in every instrument, the power of expression will be in proportion to the immediateness of the contact between the sounding materials and the performer. Hence of all wind instruments the bagpipe is the least sentimental; and strings are fully conscious of the difference, between being touched by a maiden's fingers, and by the intervention of a stick. None but the lute can have the *vox humana* tones,—the distinct soprano, mezzo, contr'alto, and tenor voices,—which reside about the middle of the thinner strings, and the miniature Dragonetti that lurks within the thickest, interchangeable at will with the cumbrous alacrity of the bassoon. The forte of the lute kind is imitation,—not of beasts or birds or things material, but of musical expressions;—the conjuring up of all recollections that hang by sounds, from a simple melody, to the triumphant "Orquesta" of the Spanish cadet that forsook Ferdinand and a lieutenancy for love—of his guitar. Of all dulcet sounds none can surpass a duett of Huerta's on the middle of the second and third strings, emerging from a wilderness of notes, deficient indeed in noise, but giving the liveliest idea in miniature of an overture by a full band*. It is Lord Byron's

before, and with the short ones marks the distance from the first fret to the second; and so on. On being asked how he secured the exact proportion of the legs, he said he rubbed the iron points upon a stone, till the compasses, used as above, came exactly to the middle of a string at twelve leaps.

* The lines presented to the *guitarrista* by Madame Emile Girardin, better known in England as Mademoiselle Delphine Gay, will be recognized as drawn from the living subject.

L'avez-vous entendu ce troubadour d'Espagne
Qu'un art mélodieux aux combats accompagne?
Sur la guitarre il chante et soupire à la fois;
Ses doigts ont un accent, ses cordes une voix.
Son chant est un poème harmonieux sans rime,
Tout ce qu'on éprouve, ce qu'on rêve il l'exprime.
Les cœurs à ses accords se sentent rajeunir;
La beauté qui l'écoute, heureuse en souvenir,
S'émeut, sourit et pleure, et croit encore entendre
Ce qu'on lui dit jamais de plus doux, de plus tendre.
Sa guitarre, en vibrant, vous parle tour-à-tour
Le langage d'esprit, le langage d'amour:
Chacun y reconnaît l'instrument qui l'inspire;
Pour le compositeur c'est un orchestre entier;
C'est le tambour léger pour le Basque en délire;
C'est le clairon pour le guerrier,
Pour le poète c'est la lyre!

image for sweet things,—"the voice of girls." Or the same frail machine can produce a *retraite*, that would draw two souls out of one adjutant,—an old soldier may positively see the little drum-boy straddle, or stir his barrack fire and think upon the dew-drop pendant at the bugler's nose:—varied on the harmonics with a *ran plan plan* worthy of him who at midnight musters the spectre "Garde," with the palpable flavour of parchment as it would come from his marrowless knuckles across the ghastly heath. And then can come pipes, and reeds, and oaten stops, and distant choirs, priests chanting merrily, or mass, or requiem, and poor lost Italy,—curse on all traitors and *justes milieus* of the earth,—and fair romantic Spain, and floating forms, and dark mantillas, and castanets that turn the air to rhythm. All these cannot be had from a spinet. But they require some husbandry,—a parlour twilight, or a turret lone, when gabbling boys are fast abed; and there is one peculiar tone, whatever be the cause, is never brought out but in the small hours of the morning. Above all, these things are hid from simpletons who seek them in a crowded theatre and then declare they nothing heard. They might as well line the stage with miniatures, and view them from the upper boxes. But he has missed the strangest effect of music, who has not heard the "Carnival of Venice" in the long gallery that leads down to the tombs of the Pharaohs. Organs would have been pompous mockeries; but the small voice of the guitar said "All flesh is grass," in a way there was no resisting. It was as if the *domus exilis Plutonia* was piping the joys and cares, that four thousand years have swept into eternity. Nothing ever gave a man such a vehement desire to cry;—not even the little duck-tails of Signor Passalacqua's nankin jacket could break the charm. It is hard the author could tell no story of the guitar. Did he never hear of the Portuguese army—would it were Miguel's—that fled and left eleven thousand guitars upon the field? Or of the surprise of quarters in the Succession war in Spain,—where the foremost cavalier found the enemy's vedette tuning his guitar as he sat on horseback, and perceiving he did it ill, took it from his hands and returned it saying *Ahora es templada**, and passed on. There must be some inward grace, where there are so many outward signs. Men have not so forgotten themselves in peace and war, without there being something that twined about their souls, in a way that "kists full o' whistles" or of hammers have not surpassed.

A description of the first impressions from Paganini's per-

* '*Now it is in tune.*'

formance on the violin (p. 218), has been very extensively quoted for its liveliness and force; though it is not quite clear whether the author means to deliver it as his own. But on one point (peace be with the describer) it will at some period give a strange idea of the state of theoretic knowledge in this country. It says of Paganini's performance, "The highest notes (contrary to every thing we have learnt) are produced as the hand recedes from the bridge, overturning all our previous notions of the art." Posterity will smile to think, that in almost the middle of the 19th century, the simplest phænomenon of the harmonic sounds should have excited the same surprise as a magic lantern, a magnetic swan, or a phosphorus-box, might have done in the dark ages;—a phænomenon too, practically familiar to every foreign peasant that tinkles a guitar*. Truly our dilettanti pay tithe of anise and cummin, and omit the weightier matters of the law.

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* There can be no reasonable doubt that the allusion in the description is to the harmonic notes; in which Paganini (the difficulty of his execution is another question) has that theoretic knowledge, which may be communicated to any intelligent child in a quarter of an hour. A string touched lightly with the finger in a peculiar manner at the distance of any aliquot part from the bridge,—that is to say, at the half, third, fourth, fifth, sixth, seventh, &c. and so on without definite limit,—produces the sound which the string would produce if stopped at the same point in the usual way. And what is more, it equally produces the same sound if touched *at any other* of the points of division into the aliquot parts,—saving always those which merge into some simpler division, as for instance two-sixths which can only be the same as one-third, three-sixths as one-half, &c. Hence in all cases, the sound made by touching at the aliquot part nearest the head, must be the same as at the aliquot part nearest the bridge; and consequently it must increase in shrillness as this aliquot part is smaller or approaches to the head. The whole of which is of every day familiarity to players on the guitar.

If the *cause* of this phænomenon be demanded, it may probably be found in the fact, that the kind of touch employed does not check all motion above it as when a string is pressed down to the neck in the common way, but allows the agitation to be communicated to the upper part; yet at the same time prevents any vibrations from being permanently kept up, except such as are formed by the string's dividing itself into the aliquot parts, the points of division being kept at rest (for only so the thing is possible) by the movements of the string on the two sides of each, being in opposite directions at the same instant of time. That the points of division all remain at rest, is palpable from the experiment of placing any small body on them, which will not be thrown off. For further matter on the harmonic sounds, see the Article on the *Enharmonic of the Ancients* in the Westminster Review for April 1832, (See *p.* 99 of the present Volume.)

It may be a further question whether Paganini has not the art of touching the harmonics upon stopped strings as well as open. His reported length of finger is favourable to it; and it is clearly possible to stop any note on a string with one finger of the left hand, and by touching at the proper point with another finger of the same hand, cause the bow to bring out a harmonic Octave, Fifth, or as the case may be. It is even conceivable that this might be done on two strings at once, by employing the alternate fingers. By such an arrangement, the theoretic power of producing any given notes in harmonic sounds, is unlimited. The *practical* difficulty, as said before, is another affair.

It has been understood that Paganini's performances on the guitar are still more wonderful than on the violin.

An amusing idea of the progress of the executive branch of music is given by the anecdote on the Violin.

'In the time of Lully, scarcely a note was struck out of the fixed position of the hand, as it was not uncommon, when the note C above the lines occurred, for the leader to cry out "*Gare l'ut*," (mind the C,) as a difficulty which required an effort to overcome.'—*p.* 223.

When the Prince of Wales laid before Giardini at Carlton House the first set of Pleyel's quartetts (then just published), Giardini shut the book and declared they were too difficult for any person to perform. (p. 224.)

That cuckoos in Leicestershire sing (if that be the right word) in the key of D, and all the owls in the neighbourhood of Selborne hoot in B flat; that flies and honey-bees buzz in F, while the large humble-bee performs the same note an octave lower, and the drowsy cock-chaffer an octave lower still; that crickets, chirp in B, and gnats trumpet in A, while the male and female death-watch tick responsive in B flat and G; are mainly resolvable into the fact that each of these classes of creatures has a common note; a thing in itself not stranger than that they should have a common size, or shape, or colour. For no part of the wonder consists in the sound's being exactly of the pitch that is called by a certain musical name; inasmuch as "the pitch has long been known to be rising through the two last centuries" (p. 234), and to have risen gradually and fairly a Minor Third (p. 273). If cuckoos therefore sing now in the key of D, their ancestors in the time of the Civil Wars sang in the key of F, and in all intermediate pitches at intermediate periods; always understanding thereby, that the cuckoo's note is eternal, but what musicians take for the pitch is altered. Why the musicians should be continually raising the pitch of their instruments, it is not easy to define; but probably it has kept pace with improvements in fiddle-strings, inasmuch as there is a constant temptation to screw up the strings to the utmost they will bear without breaking, for the sake of increased clearness of tone.

Of the Pianoforte, it may be noted, that no performer seems yet to have made it a *sostenuto* instrument to the extent of which it is capable. The story is well known, of the brilliant green on the top of a chapel, which was discovered to be formed by a chequer-work of blue and yellow. In something like the same manner, brief sounds may be repeated and compounded so as to produce the effect of one *sostenuto* chord. An exercise well known by the name of Steibelt's Storm, is an example of approach to the effects meant.

When the knowledge of the theory of music has made more

progress, it is apprehended the pianoforte will not be considered "of all instruments pre-eminently the best for the accompaniment of the voice." It may be hoped the time is approaching, when neither singer nor violinist will be tolerant of a tempered instrument. Singers sing to the pianoforte because they have bad ears; and they have bad ears because they sing to the pianoforte.

The Eighteenth Chapter complains that vocalists sing out of tune. And how should it be otherwise, when if they do not, it must be in defiance of what they are taught and not by means of it? A third of a comma is considered as the limit of what ordinary hearers do not recognize as out of tune; and the education of singers and other performers, as now conducted, is directed to making them gulp down errors of a whole comma, or three times the quantity that makes untuneableness, under the various titles of temperament, defectiveness of scale, and quality of keys. The first step towards executing, is to know; and the musicians do not know, and cannot write down and assign within three times the difference that makes untuneableness, what is in tune and what is not. A man is very likely to have all the music-masters in the country on his back for saying this; for they mortally dread anything that should shake established notions of perfection. But it is true for all that. The fault is not *cantorum* but *musicorum* here; and as such may be set off against the monkish verse.

There is a simpler explanation of the peculiar sounds of thunder than referring them to "distant echoes." It is proved from the evidence of the eye, that the electric spark in thunderstorms passes through very considerable distances; and, from the same evidence and that of other experiments, it is known that its passage is what may be denominated instantaneous. Hence, as the progress of sound is only at the rate of 1142 feet per second, the ear must receive the sound which proceeds from different points in the track of the spark, successively and not all at once. If a line of soldiers a mile long, should all discharge their musquets together on a visual signal as for instance the dropping of a flag, an ear near one of the flanks must hear a prolonged roll for nearly five seconds, diminishing in strength; if near the middle, it must hear the roll for about two seconds and a half, but doubled in strength, though on the whole *diminuendo* as before; if at a fifth of the way from one flank to the other, it must hear one second of double strength, followed by three seconds of inferior force, each severally *diminuendo**. But

* This phænomenon of successive sound may be observed in a single battalion by a hearer placed near a flank, on the pieces being struck on the ground together in the last motion of "Order Arms" by signal by eye from the fugelman.

if in the middle of the line there should be formed a zig-zag, it is clear that it might be so situated as instead of the reports of one or two musquets, to bring to the ear at once the reports of four or five; this therefore is competent to cause a *crescendo*, and by increasing the number and extent of the zig-zags it may be varied in an indefinite number of ways. Now if the course of lightning may be judged of by the eye, it assumes precisely this form of zig-zags. Again, if the ear should be placed in the perpendicular to the middle of the line of soldiers and at a considerable distance, the effect of the discharge would approach to that of a single report; an effect sometimes heard at sea, where thunder has been taken for the guns of a distant action. When the sound of thunder is very loud and brief, like the explosion of a near cannon, it is probable the discharge has taken place into some neighbouring body on the earth's surface, and from a cloud at a short distance; for happily it seems to require a nearer approach to produce the electric discharge into the earth, than from cloud to cloud. And in cases of accident by lightning, the near witnesses seldom fail to describe this species of sound. In this manner all the phænomena of the sound of thunder may be considered as accounted for.

On the Organ, used as it is for grave and severe compositions, the most desirable improvement would be the obtaining correct harmony by substituting a diversity of pipes and finger-boards for a portion of the useless stops. This in fact is nothing but what is done on the Clarionet and other instruments; and while every performer in a band of wind music is seen carrying three different instruments in different keys, nobody has made an organ capable of performing with corectness in the three related keys of most ordinary demand, as for instance those of C, F, and A*.

* A writer in the weekly paper *The United Kingdom*, April 15, 1832, has failed to understand what was said on this subject in the Article on the *Enharmonic of the Ancients* in the Westminster Review for April 1832. There was no mistake; and the writer's misapprehension probably arose from not seeing the extract where the subject was more amply treated of in some of the subsequent pages. An organ has from 500 to 5000 pipes, for the purpose of making from 6 to 60 distinct organs of different qualities of tone; and the proposal was, that instead of making so many organs of merely different qualities of tone, some should be made to play correctly in different keys, as for instance one organ in the key of C, another in the key of F, and another in the key of A; which, as stated above, is nothing but what takes place every day in military bands in the case of the Clarionet. The question whether the same pipe might not be made to serve in different keys when its sound happens to be found in both, was a merely subsidiary question of economy.

The fact alluded to as having been first mentioned by Huygens, is apprehended to be something very different from continuing the scale four or five times upwards and downwards again from a given sound. What is intended is supposed to be the circumstance, that if, for instance, the notes C, F, *D*, G, C, are sounded in the key of C, the *D*, which is a Dissonance, cannot make a perfect Minor Third with the F which precedes, and *also* a perfect Fourth with the

On the subject of the Clarionet it may be observed, that if the object of providing different clarionets is to play in the related keys, they should be in the keys of C, F, and A ; and not as stated, C, B flat, and A. If this were done, it would be a reason for fixing improved keyed instruments to those particular keys, for the sake of taking advantage of the analogy.

The Trombone, or as it ought to make a point of honour of calling itself, the Sacbut*, has the advantage of being the only instrument besides the voice and Violin kind, which has perfect command over its intonation, and is consequently capable of executing correct harmony in any succession of keys. For this reason, it may be assumed that the sacbut will some day enact a higher *rôle* than at present†. If the statement is correct of the instruments in actual use having been fashioned after a specimen found in Herculaneum and presented by the King of Naples to George III, it is the best consequence known to have arisen from the connexion between the two Courts. At the same time it may be noted that the sacbut, besides being known to the translators of the bible‡, is lively portrayed in Mersennus ; which is all anterior to George III.

G which follows ; and if a perfect Minor Third and Fourth be made in these places, then the G is not the Fifth, but a sound lower by a comma than the Fifth ; and consequently if the final C be made a perfect Fifth below this last sound, it must needs be a comma lower than the C begun with, and if the whole of this was repeated eight or nine times, the C must end by being a whole Tone lower than was set out with, and so on without limit.

There can be nothing wonderful in the G being a comma too low for the Fifth, when it is purposely and of determination aforethought, taken with an interval from the preceding sound *D*, of a comma less than is the interval from that sound to the Fifth. The puzzle lies only in the fact, that no sound can make the interval of a Minor Third below the Fourth, and also the interval of a Fourth below the Fifth,—for this plain reason, that taking the interval of a Minor Third below the Fourth, and the interval of a Fourth below the Fifth, do not come to the same place or sound, but to places that differ by a comma. It is as if two towns should be taken, one *nine* miles South from the other, and from the southernmost a traveller should proceed *fourteen* miles South, and then *twenty-two* North, and wonder he had not arrived at his northern town ; the whole mystery being in the circumstance, that nine and fourteen do not make twenty-two. If any man insists on taking a Minor Third from F to *D*, and then a Fourth from that *D* to G ; he does not take the intervals in the scale, but the intervals that are *not* in the scale, and consequently cannot complain of the results. History might be looked through, without another instance of a marvel raised on such a simple cause. The sensible inference is only, that the Dissonances are *double*, or have two forms differing by a comma ; of which one or the other must be taken, according as the Dissonance happens to be most strongly connected with the Fourth or with the Fifth by the accent or other peculiarly of the musical phrase. The whole of which, instead of being far to seek, was to be found scattered in various parts of the extracts given ; though it appeared in a more collected form in the work quoted from, in a note attached to the end of the first extract from p. 7.

* From the French *Sacquebute* ; which again is from the Spanish *Sacabuche*, from *sacar* to draw out, and *buche* throat or stomach.

† Since this was written, mention has been seen of a band of Sacbuts, tenor and bass, on the establishment of some of the German princes.—1839.

‡ Daniel iii. 5.

That the sound of a string should be a compound of three sounds, is one of the musical facts which wait for explanation. It is suspected the author's account of it is not exact; and that instead of the sounds being the primitive, 5th, and 10th, they are the primitive, 12th, and Major 17th, which makes great difference in any attempt to explain. The assumption that from this fact the principles of music are to be derived, though very common, may be held to be gratuitous. There can be no doubt of there being a community of cause; but there is no evidence of anything else.

The 12th and Major 17th are the sounds of the *third* and *fifth parts* of the string. However difficult therefore it may be to conceive, there is the evidence of the ear that while something is vibrating in the period that produces the primitive sound, something else is vibrating *three* times as fast, and some other thing *five*. And the most feasible surmise would seem to be, that a third part of the string may be vibrating at one end and a fifth part at the other, while the remainder, including the two interior points which limit the vibrations of the extreme portions, vibrates in the period appropriate to the whole string. But why do the ends take no proportions but these? Is it that an odd number of vibrations in the period of one vibration of the whole string, is necessary to make the vibrations after commencing together in one direction, commence together in the other also? And if so, why does not the string divide itself into a third at each end? Is it perchance that thirds vibrating together at each end would be too powerful for the remaining third in the midle, but that a third and a fifth part do not produce the same effect, inasmuch as their vibrations in great measure cross and counteract each other? And if it is established that the division into third and fifth is the only one that can take place consistently with the motion of the remainder of the string,—why does the string divide itself at all, and not vibrate *simpliciter* through its whole length? Is it that when struck, it is not affected in all its particles at once, and so the *vis inertiæ* of the particles successively acted upon, causes the vibrations to commence in some or other of the divisions, before a vibratory motion is communicated to the whole? Finally, has anybody ever heard the sound of any other portion of the string? For if this can be heard, it goes against the theory of the two ends.

"Modulation" does not appear to be well defined. Instead of "a progression of chords, or mixed sounds," it is *passing from one key to another;* a change of key being defineable as consisting in taking a new portion of the string to begin with in the calculation of the harmonical divisions.

The *complexions*, as the author styles them (p. 438), of the different keys, constitute a *vexata quæstio* which has no appearance of being speedily settled. Any difference in the effect of the same music arranged in different keys, can only arise from some of four causes; First, a difference in pitch; as for instance, if a violin should produce a marked alteration in the effect of the same tune or air, by screwing up or letting down the strings through a given interval; Secondly, an alteration in the quality of tone of a given instrument, by taking the same notes in one part of the instrument instead of another; as the self-same written notes and at precisely the same pitch and without any difference in the intervals, may produce a different effect on a guitar from being sounded by stopping near the middle of the thicker strings, instead of near the top of the thinner; Thirdly, a difference in the practical execution in different keys; as for instance playing an air on the black keys of the pianoforte or with a great admixture of them, will give a different fingering from playing it in the key of C or on the white, and this may produce some difference of effect either directly or through acting on the imagination of the performer; Fourthly, an alteration in the degree in which the notes on a fixed instrument severally approximate to the true sounds, when the scale is begun on any particular one for the key-note. It may be conceded at once, that the three first causes may in certain cases produce a certain degree of effect; but the last is the point to which most importance attaches. And the first question that suggests itself hereon is, *Who* are the foremost in asserting the difference of keys? Are they the singers and violinists: or are they the organists and pianofortists? If they are the latter, then the whole may be suspected to be an innocent partiality, a branch of the *polypus Hagnæ*, for turning the defects of their instrument into beauties. There are some points which want settling also, before issue can fairly be joined. If the key of F is "rich, mild, sober, and contemplative," and G "gay and sprightly;"—when F was G, as it was a hundred years ago, was F "gay and sprightly," or "rich, mild, sober, and contemplative"? And if some sprite should shift the whole strings of a pianoforte an inch to the right, so that the string which before fell under the hammer of F should now fall under the hammer of G, would the key of G still be "gay and sprightly," or would it be turned into "sober and contemplative"? If these were exactly settled, it would be easier to debate the subject than at present. But in the mean time the vehement presumption is, that so far as the different character of keys has any real foundation in the construction of the intervals, it will be found to depend on their

comparative approximation to correct harmony in different cases, and not on their departure from it. The fact long practically known to musicians though not carried into its consequences, of the *duplicity of the Dissonances,*—and the sharpness and vigour given by making the distinction between the Great and Small Tone in those and other places,—are more than sufficient to account for any variety. A comma is about one-third of the smallest simple interval in the scale, which is that between the Major and Minor Thirds, Sixths, &c.; and if an engraver were to maintain that rubbing down the prominences of his engraving by a third part in one place or in another was a matter of indifference, he would do what in their dread of puzzle is done by the musicians.

In p. 455 on "Tuning" appears another miraculous instance of the state of musical science as respects first principles.

"If we stop a violin string mid-way between the nut and the bridge, either half of the string will sound the octave above to the whole string; and if we vibrate two-thirds of the string, this portion will sound the fifth above to the whole string. The same law applies to wind instruments and all sounding bodies.—Upon such simple facts we might have supposed the musical scale to be founded; but when we come to tune a pianoforte, and raise the fifths one upon another, to our surprise we find the last note C, too sharp for the C we set out with. *This inexplicable difficulty no one has attempted to solve; the Deity seems to have left it in an unfinished state, to show his inscrutable power.*'—*p.* 455.

Will it be readily believed a century hence, that this "inexplicable difficulty," this "*dignus vindice nodus*" which the Deity is introduced to settle,—was nothing more than the fact that $\frac{2}{3}$ of $\frac{2}{3}$ of $\frac{2}{3}$ of $\frac{2}{3}$ of $\frac{2}{3}$ of $\frac{2}{3}$ of $\frac{2}{3}$ of $\frac{2}{3}$ of $\frac{2}{3}$ of $\frac{2}{3}$ (a schoolboy's question in vulgar fractions), is not equal to $\frac{1}{2}$ of $\frac{1}{2}$ of $\frac{1}{2}$ of $\frac{1}{2}$ of $\frac{1}{2}$ of $\frac{1}{2}$; or as as an algebraist would more briefly state it, $\overline{\frac{2}{3}}^{12}$ is not equal to $\overline{\frac{1}{2}}^{7}$? Why should it? Would not the wonder have been if it had? Is it any more wonderful than that twice three is not five? We take two-thirds of a string and of its remainder, twelve times over; and then halve the same string seven times over; and finally call on the Deity to show the reason, why we have not arrived at the same point. This comes of instruments with keys. When the attention has been directed from youth up, to the black and white keys of a pianoforte, the thing appears incomprehensible; yet the whole question resolves itself into whether the Fifth be really seven-twelfths of the Octave,—which it is not. If a pianoforte is tuned to an equable division like the guitar,—in which the Fifth is not a Fifth but only something like it,—then twelve such Fifths will come to the same sound as seven Octaves; and

if not, not. As it is, the musicians are in a state of high quarrel with Providence, for not having made $\frac{7}{8}\rceil^{12}$ equal to $\frac{1}{2}\rceil^{7}$. They wonder and fret, and want to have the constitution of arithmetic altered, to save the band's-men of the Guards from carrying three clarionets; for this is what it comes to. They are not content to inquire what *is* harmony, but they are anxious to impress on the Creator what they could have wished should have been harmony; and the particular object of their desires, is that $\frac{7}{8}\rceil^{12}$ should have been equal to $\frac{1}{2}\rceil^{7}$.

But there is no need to confine the wonder to the Fifth. If a Fourth be taken twelve times, it will fail to coincide with five Octaves, by the same quantity as the Fifth; only instead of something more than a comma too much, it will be too little. A Major Third taken three times, will fall short of the Octave by about *two* commas; and a Minor Sixth, will exceed two Octaves by the same. A Minor Third taken four times, will exceed the Octave by about *three* commas, or on a rough estimate the difference between a note and its flat or sharp; and a Major Sixth, will fall short of three Octaves by the same. A mystery is a less mystery, when it is only one of half-a-dozen. And what does it all prove, but that the true intervals do not divide the octave into equal parts, and consequently they are not interchangeable, as musicians might have found convenient?

The author's way of ever and anon dropping an octave, has a tendency to obscure the calculations, and is attended with no benefit but that of keeping certain notes within certain lines.

If any interest has been excited on points connected with musical knowledge, the writer of this Article may boast of having co-operated with the author of "The Music of Nature*."

WESTMINSTER REVIEW, 1 October, 1832.

ART. VI.—*Second Supplement to the Article on the "Silk and Glove Trades" in the Westminster Review for 1 April*, 1832.

THE "True Sun" returns to the charge†. He says, that in saying that the tradesman to whom the consumer of the monopoly-priced gloves or stockings would have transferred the shilling may lose custom to that amount, "but to the same extent, precisely, some other tradesman gains an increase of custom,"—he did not mean the glover or silk-weaver, but he meant the man to whom the glover or silk-weaver would transfer the shilling in the course of trade.

This is a new meaning; but nobody was bound to infer it from the words employed.

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* For a Note bearing on the second paragraph of this Article, see the end of the Volume.

† 2 July, 1832.

It might pass for an answer, to reply, that if the man to whom the glover or silk-weaver would transfer the shilling is to be brought in on one side, the man to whom the tradesman who loses custom would have transferred it must be brought in on the other. If the statement had been that the loss to this last man should have been reckoned and have made *loss the third*, the opponent would not have been a moment in finding out, that it was equally fair to bring in the man to whom the glover or silk-weaver transferred.

But this answer, though perhaps sufficing in point of logic, is not the best that can be given ; for it is only parrying one illusory item of an account, by showing that the same rule that admitted it would admit another that would neutralize it. The fact is, that *both* the items are illusory, and only specimens of the error mentioned before, *of counting the same things over and over*. The shilling to the trade of the glove-maker, includes the gains of the individuals to whom he may transfer any portion of it, and of all others to whom *they* again may transfer any portion, to the end of the process. The shilling is not transferred over and over in the entire ; but twopence, it may be, sticks with the glove-maker as his profit, and with his workmen as their wages ; and the rest (tenpence) is transferred to different persons, some in the shape of wages and some of profits, and of these portions a part, as perhaps twopence more, sticks with them, and the remainder is transferred to somebody else ; and so on, the whole shilling being enjoyed in the end by somebody. If the payment instead of being made with a shilling was made with a peck of wheat, of which the glove-maker and his workmen put a pint into their pot,—and the tradesmen to whom the remainder was made over, put another, —and so on till the whole was eaten ; it would be plain that the actual benefits to the trade and all concerned in it, amounted to a peck of wheat, and not to a peck over and over. And for any benefits that may be alleged as arising to the concerned in the wheat trade, it must be the same thing to them in the end whether the peck is procured from them all at once, to be passed in a mass to the glove-maker,—or whether it is procured by twopennyworths at a time by various sets of people. In the trades from which custom is taken, the opposite processes take place. There was a mistake therefore in counting the portions of a shilling over and over.

The next statement is

' That the " robber's gain," and the " gain to the branch of manufacturing industry in which he is presumed to be engaged," ARE two things. For the imaginary individual in question was presumed to

have two sources of gain—robbery on the highway and mercantile pursuits.'

There is a mistake here. The man was never "presumed to have two sources of gain;" on the contrary it was distinctly stated, that he might have which of the two he liked, but he could not have both. If the robber puts the shilling into his pocket and takes it out again to apply to the benefit of his trade, there is not a gain of a shilling to his trade, and of the same shilling to the robber over again. Putting a shilling into his pocket and taking it out again, is not gain.

The same mistake runs through the statement as repeated;—

'There are two distinct operations in the case. The robber's gain on the high road, balances the robbed man's loss. This is the first operation. The robber's trade—(a thing quite apart from his dealings on the highway)—is enlarged by the amount of his plunder—while some dealer, to whom his victim would have transferred the money, has his transactions diminished to the same extent. This is the second operation—one, as it appears to us, obviously distinct from the other.'

The error is simply in making the robber's gain balance one thing, and the employment to his trade at the same time balance a second thing; whereas if the shilling is taken to enlarge the robber's trade, the gain to the robber as distinct from the enlargement of his trade, is thereby annihilated and made non-existent.

In what afterwards follows, the "True Sun" may be held to have overlooked the words—"*as distinct from the advantage to his trade;*" and the charge of "jumbling" does not appear to be made out. That the man's success as a robber actually does, in the case supposed, "exempt him from suffering in the same degree from the effects of monopoly, as those around him do," contains nothing contrary to the statement advanced. The robber gives three shillings for a pair of gloves, of which he has had the luck to steal one shilling; on the whole therefore he only gives two, or is in the same situation as he would have been if there had been neither robbing nor monopoly. And what was stated was, that if he is obliged to give this shilling to the monopoly he does not gain it. He may be the monopoly himself if he chuses; but the shilling he puts into his left-hand pocket for the monopoly, he does not also keep in his right-hand one for himself.

These objections, at the same time, are highly useful; and have done much towards increasing the clearness of the case.

WESTMINSTER REVIEW, 1 October, 1832.

ART. IX.—1. *A Vindication of Dr. Paley's Theory of Morals from the Principal Objections of Mr. Dugald Stewart; Mr. Gisborne; Dr. Pearson; and Dr. Thomas Brown. With an Appendix, containing Strictures on some Remarks of Dr. Whately, Principal of St. Alban's Hall, Oxford.* By the Rev. Latham Wainewright, M.A., F.S.A., of Emanuel College, Cambridge.—8vo. pp. 204. London; Hatchard. 1830.

2. *Fort Risbane; or Three Days Quarantine.*—12mo. pp. 266. London; Smith, Elder, and Co. 1832.

THE first of these, is a vindication of Paley for the support he gave to the principle of "utility." It is of comparatively small importance to assign the degrees of priority in the illustration of a useful principle; but everybody knows that Priestley was the modern inventor (for the same thing may be invented many times) of the theory of "the greatest sum of happiness," which was then taken up by Bentham, and afterwards by Paley*. The *thing* is the thing; and the object is to support it here.

There seems, as noted by his vindicator (p. 7), to be some confusion in Paley's language, between utility being an *obligation*, and *a criterion or standard*; and it is very probable the same may be traced elsewhere. The first position to be aimed at, is the establishing that utility, or the production of the greatest quantity of happiness in the aggregate, is the substantial standard of what men at various times and places have more or less darkly aimed at under the titles of morality, virtue, fitness of things, the *honestum*, the *decorum*, and what not besides. The next is, to give an answer to the question, why or from what motive affecting himself, a man should regulate his own conduct by the rule which will establish the greatest aggregate of happiness, not of himself *simpliciter*, but of all concerned;—which constitutes what is meant by obligation. And here an answer, at least of this world, would have been hopeless, if the constitution of nature had not been such that it happens to be proveable, that the rule which will promote the greatest happiness in the aggregate, is the rule a compliance with which, taking all the adjuncts and probabilities into the account, *is more likely to promote the ultimate happiness of the individual, than any other that can be pointed out before trial.* There is no use in saying, that there have been successful thieves and fortunate assassins; the question is, whether the

* See a full statement with dates, in the Article on the "Greatest-Happiness Principle," in the Westminster Review for 1 July 1829. Art. 16. (*p. 125 of Vol. I. of the present Work.*)

proportion is sufficient to make thieving and assassination good and likely trades upon the whole. The fallacy is simply in assuming that to be known, which is not known. If a man could be sure of obtaining the 20,000*l.* prize in a lottery, it would be policy to give 19,000*l.* for a ticket; but to do it without being sure, would be the act of an idiot. Just such a folly does a man commit, who breaks through any of the tried and approved rules of morality, without knowing whether he shall be the lucky man that escapes the consequences or not. The consequences do not fall, at least in their extremity, on all; but the question is, whether it be the act of a wise man, to incur the risk of the consequences at all. This is an *obligation*,—if there is one for a man's keeping his fingers out of the fire. It might make a more immediate and urgent one, if there were a devil as on the stage, appointed to do summary justice on every act of immorality of a certain magnitude. But there is not; or at all events, as expressed by a poetical philosopher, "he very often waits." Whence arises a practical necessity for a more homely and instant obligation; and it consists in what has been described above.

Dugald Stewart and others, it is stated (p. 8), have objected, that this system entrusts to every individual the power of deciding what line of conduct will, at all times and in all places, be most beneficial to the great bulk of mankind. And how should it be otherwise, or what conceivable rule is there that is not liable to an objection of the same kind? There is no obscurity about what rule it is the objectors have in their eye, and by reference to which they think they settle the question. They mean a religious rule, sanctioned by the authority of revelation and of future reward and punishment. But in what way does this remove the difficulty? A religious rule cannot in the nature of things define what is and is not to be done, with more precision than a moral rule; for all that the powers of language can do for the one in the way of preciseness and explanation, the other if it pleases may borrow. To say that the religious rule introduces a new motive, is an evasion of the question. It does introduce one; but the question was not of preventing men's contempt of a rule's sanction, but their evasion or misapprehension of its terms. The shortest way is at once to take the particular rule the objectors have in view. Have not all imaginable breaches of its spirit, or of what sensible and untempted men acknowledge to be such, been carried into practice under the express plea of obedience to its letter? What species of persecution and corporal suffering, for example, has not been inflicted upon men under the pretence of "compelling them to come in," or "delivering them unto Satan

for the destruction of the flesh, that the spirit may be saved"? There is no hostile intention in this; and no dread of anybody that may chuse to misinterpret it. But the authenticated fact and stamped in the history of mankind, is that without any exception, no rule has been able to guard itself against the misconstructions or misapprehensions of those who profess to follow it. If answer be made, that these misconstructions are in the eyes of all impartial and considerate persons directly opposed to the spirit and bearing of the whole,—the same is equally applicable to the moral rule. The misfortune is, that when men want to break a rule, they are neither impartial nor considerate. Show us how to ensure a man's being these, and he shall quickly be made to acknowledge the spirit and bearing of a moral rule. The objectors therefore have taken nothing by their motion.

It has pleased the same opponents, to apply to the theory of utility the title of "the selfish theory of morals." Now this is a play upon a word. The secondary meaning of the word "selfish" implies an undue or culpable attention to a man's own feelings or interests; and if this is what the opponents mean, they are bound to prove that it applies. But the truth is they intend to stand upon the primary fact that the motives urged must necessarily apply to a man's "self," and take the benefit of the secondary meaning by a side wind. Because the motives which act upon a man must needs operate upon himself and not upon somebody else, it does not follow that they are selfish in the bad meaning of the term; but this is the fallacy involved. Take any case that can be chosen,—the case for instance of a martyr,—and there can be no denying that his motive whatever it may be, must be one that acts upon himself. If like Stephen he sees the heavens opened, still this is a motive that acts upon himself; though it would be a fraud and abuse of language, to denominate it what is ordinarily meant by selfish.

A difficulty that occurs in this place, is to account for the actions of individuals, who without any powerful expectations of reward or punishment in a future state, have voluntarily submitted to great evil, as for example the loss of life, for the maintenance of a principle. The solution must be in the constitution of the habits of thinking; which make life after the sacrifice of the principle, a scene of greater suffering than the removal of it by death. It is no uncommon event, to see individuals under the pressure of particular kinds of losses and privations though unaccompanied with bodily pain, either seek death, or give way to such a process of despondency as is only death under a lingering form; and if an individual, in consequence

of the previously confirmed constitution of his habits, would suffer the same degree of mental pain from the abandonment of a principle, there appears no reason why he should not prefer death as in the instances alluded to. This motive might be designated, the Sense of Heroic Obligation. The most remarkable instance of its operation,—if it may be assumed to belong to true history,—is that of Curtius. In his case there seems to have been nothing to point out such a sacrifice as the peculiar duty of the individual, and consequently no loss of public opinion to be attendant on the non-performance. What was it then that outweighed in the mind of Curtius the natural love of life? By the very nature of the case, all chance of enjoying honours was to be at an end; and though it is possible he might possess some vague idea that deeds of patriotism were rewarded in Elysium, it has never been believed that Curtius was a martyr to religious expectation. Curtius then, in consequence of the approbation with which public and extraordinary acts of patriotism were regarded in Rome, had through all his life connected the highest degree of mental pleasure with the performance of such actions; and this pleasure, roused to the highest pitch by the idea of the surpassing exertion he contemplated, was more than sufficient to outweigh any pain attendant on the apprehension of dying.

At the same time this principle of action, dependent chiefly on the formation of habitual connexions of ideas, is by no means peculiar to cases like that of Curtius. It is probable on the contrary, that it is one of the most universal of all moral agents, and acts perpetually as the sheath and preservative of deeper principles. The Creator appears to have surrounded the great organs of both physical and moral feeling, with a cloud of subservient sensations and precautionary irritabilities, which must be broken through before the superior sources of action are brought into question. A man will no more exist under the continual irritation of the fear of hell or of the gallows (which for popular use may be considered as the "ultima ratio" of religious obligation and worldly expediency), than he will exist under the continual irritation of any powerful physical stimulus. The stimulus may be applied; but it will either destroy the man, or lose its effect. Hence it has been wisely ordained, that the machinery of moral existence should be carried on principally through the medium of the habits, so as to save the wear and tear of the great principles within. For the most august and awful motives, if continually brought forward as the object of vulgar and ignoble familiarity, will infallibly in the end be viewed with the same unconcern as that with which a grave-digger regards mortality.

Nor can any change be imagined so perfect and complete, as that which takes place through the medium of the habits in consequence of some great affection implanted in the mind. For the habits, which insinuate themselves into the thousand inconsiderable acts of life, do really constitute by far the greater part of man's moral conduct. And when these are moulded by the introduction of a new principle, nothing can more nearly approach to the making of a new man; nor can any stronger distinction be drawn, between a principle which may be said to be vital or actually living and flourishing, and one which is only matter of dead and fruitless speculation,—than that the one insinuates itself into practice through the habits, while the other remains in the shape of a barren and theoretic assent.

A perfect knowledge of human nature was in the prayer, "Lead us not into temptation." No man ever resists temptation, after it has begun to be temptation. It is in the outworks of the habits that the defence must lie. No apprentice ever refrained from his master's gold, after his eye had once begun to gloat upon it, and he had got over the habitual feeling which made any approach to its appropriation an impossibility. No Joseph ever resisted, except through the impulse of pure fear, after he had once begun to revolve the possibility of giving way.

The defenders of a "moral faculty" maintain, that the existence of moral sentiments in the infant mind is not sufficiently accounted for by imitation, instruction, and the habitual association of ideas; and therefore they plead for something which they call a "moral faculty." This resembles Cicero's intimation, that the readiness of boys to learn is so surprising, as to lead to the suspicion that they must have existed in some previous state;—a surmise which a venerable classical pedagogue was wont regularly to meet with the assurance, that in all his experience he had never fallen into any such conclusion. Instead of evincing any innate moral faculty, children are evidently by nature as free from it as from the letters of the alphabet. A young child has no more idea of not affirming or denying a given proposition as may suit its momentary convenience, than it has of not ejecting a hot mouthful and substituting one that is more pleasant to the feel. When it has been told that if it says the thing that is not, it will be whipt, its friends will run away from it, and finally it will go to the bad place,—all making good and competent motives to a child or any other person, it speedily begins to comprehend that the truth is to be told and the falsehood let alone; but in all this there is clearly no display of anything like an innate faculty.

If there is any such thing as a faculty established for the purpose of telling man what is right and wrong, it at all events varies very oddly in different latitudes. For there is scarcely any assignable thing that is in some places announced to be wrong, that has not in others been declared to be venial or right. In short the boasted monitor is so evidently reducible to Locke's definition, of being "our own opinion of the nature of our actions," that its existence at all must depend on proving, that men's opinions of the nature of their actions are never either contrary or wrong.

Nostra res agitur in the Note in p. 110.

'Respecting Mr. Bentham's admired work on "Morals and Legislation," in which it is apparent that he has devoted more of his attention to the latter of these branches than to the former, I shall only observe that it betrays much inconsistency in his manner of applying the principles of utility. When he describes "the greatest amount of happiness" to be the *rule* of our conduct, which he does in his first chapter, he so far agrees with Paley; and where he considers it as the *sole obligation*, (Chap. II. sect. 19,) his opinion is closely allied to that of Hume. His commentators, however, maintain, that the great object he has in view, (though it is certainly mentioned in a very summary way, Chap. XVII. sec. 6 and 7,) is to show that every man, by consulting the greatest happiness of the community, adopts the surest method of securing his own. If the truth of Revelation be admitted, there can be no question that this position may be fully established; but without this admission, the attempt would as clearly fail. In numerous instances it will not be denied that the assertion may be just; but since there are many cases in which the most patriotic sacrifices would be attended by no such result as is here predicted, I must again ask,—what can morally oblige any rational agent to pursue the welfare of the public, with pain, poverty, and ruin staring him in the face, and without the remotest prospect of any future recompense for all the intermediate sufferings which this class of moralists consider him as called upon to undergo?'—Note. p. 110.

The answer has been given already;—Mental habits and associations, producing a greater amount of pain from the breach of the principle that the welfare of the public is to be preserved, than from the endurance of the consequences of maintaining it.

"Fort Risban*" is a brief specimen of the polemical novel, which is one of the inventions of the present age. It treats of morals, politics, and matters high, and ends as in duty bound, with the intimation of a marriage that is likely to be the result.

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* Why does the author mis-spell a French word which is in all the dictionaries, by writing *Risbane*?

Amidst the clash of discordant collocutors, it is not always easy to be certain what the author meant to stand, and what to be confuted; but a fair inference is, that what he does not answer, he intends should be held good. Besides, Mr. Pungent is the marrying hero; who is always in the right. In this view there is a passage which will admit of a comment, if it can be done to edification.

'MR. HARTLEY.

'There has been much said and written about the greatest-happiness principle. But every man forms a different estimate of happiness—

"Some place their bliss in action, some in ease."

How then are we to be agreed as to what is the greatest happiness, since each endeavours to reach the goal by a path of his own tracing?

MR. Mc CORQUODALE.

Truth, when once made manifest, must be universally acknowledged.

MR. HARTLEY.

But if the happiness of one party be inimical to the happiness of another?

MR. CYCLOVATE.

The greatest aggregate of happiness, reckoning in kind, duration, and degree, must always be sought; we are not to consider individual cases, but the whole mass. It is a reference to this principle which, in disputed cases, distinguishes the true from the pseudo-morality.

MR. PUNGENT.

This would lead to very pernicious results, and has already led to the promulgation of a great deal of nonsense.

MR. Mc CORQUODALE.

That remark only evinces your total ignorance of the subject, sir.

MR. PUNGENT.

What say you to this? "If, for example, it was ever contended that it was a moral act for a man to kill and eat his father, it was supported on the ground that it was for the happiness of society and of themselves that men, on arriving at a certain stage of decrepitude, should be put out of pain, and that it was a mark of respect for their sons to eat them. There may be doubt whether the reasoning was good, but there is none that this was the reasoning." The Utilitarian school strangely mystifies and confuses the plainest rules of morality.

MR. CYCLOVATE.

On the contrary, it demonstrates clearly, that for "individuals—societies—nations—to 'do as they would be done by,' is sound earthly policy."

MR. PUNGENT.

Proving what has been proved more than eighteen centuries back; —wrapping in obscurity a beautifully simple precept, which can be brought home to every bosom. There is nothing vague, nothing undefined in this; it embraces the whole code of morality; and a man can walk in the high path of duty—can never doubt as to the rectitude of his actions, if they satisfactorily evince that he has complied with the injunction, "Do as you would be done unto." Although men may want to be told that this is their duty, yet few would dissent from its truth. To preach this doctrine is therefore useful; but to pretend to it as a modern discovery is absurd; while its new name, "the greatest-happiness principle," at once involves us in a maze of perplexities. How much more difficult to answer, "What is for the greatest happiness of man?" than to learn the simple rule to "do unto others as we would be done unto." Thus, then, the modern innovation deprives the precept of the Divine moralist of that wide-extended application which caused it to be of practical utility alike to the ignorant and to the wise.'—*p.* 157.

As Mr. Tythinkind here calls out for his supper, there is every appearance that the author meant this to stand. The passage about eating fathers, is hardly new enough to be nonsense; for it is little more than Pascal's remark, "*Le larcin, l'inceste, le meurtre des enfans et des pères, tout a eu sa place entre des actions vertueuses**." It is difficult to see how either it or Pascal's, mystifies or confuses any rules of morality. In the charge of "proving what has been proved more than eighteen centuries back," for "proved" should be read "enjoined;" and there is wide difference between a precept and a proof. The answer to the intimation that "the greatest-happiness principle" is superfluous since the promulgation of the rule of "doing to others as we would they should do to us,"—is that the followers of that rule cannot interpret it themselves, without calling the despised "greatest-happiness principle" in aid; as was demonstrated *in loco*†.

As was intimated in the course of the controversy referred to, the mistake of the theologians is in not pushing the "greatest-happiness principle" to its conclusions, and then appealing to the arguments derivable from it in their own favour, in the same manner as they would to deductions from chronology or any other human science.

* "Theft, incest, the murder of children and of fathers, all have, in some place or other, been ranked among virtuous actions." *Pensées. 1ère partie, art.* 6.

† Westminster Review for 1 January 1830. Art. 14. (*p.* 240 *of Vol. I of the present Work.*)

WESTMINSTER REVIEW, 1 October, 1832.

ART. X.—*Supplement to the Article on the "Renewal of Bank Charter" in the Westminster Review for 1 July, 1832.*

OF all ways of studying a subject, there is none like keeping up a controversy before the public. The idea of public inspection wonderfully sharpens the attention; and all that may be error, has the chance of been rubbed off by collision. In fact a theory which has not in the language of the Universities "kept an Act" of this nature, is not much to be depended on for either accuracy or force.

The most taking argument that has been observed in favour of private banking since the publication of the Article to which this is a supplement, is that the sovereigns are men's own, and "a man may do as he will with his own." In other words, if the bankers take the people's sovereigns, it is by consent, and therefore there can be no harm.

The first step is to close unreservedly with the statement, that the sovereigns are the people's own. They are their own for the simple reason that they paid for them. If neither taxes nor government existed, men would traffic by means of an instrument of exchange of some kind, and this instrument they must pay for themselves, by the token that it is certain they cannot get it without. If the instrument is assumed to be corn, and a man on an average has twenty bushels of corn always in his hands which he is to employ as the instrument of exchange, he must have paid for these twenty bushels as much as for any other he eats or deals in, and therefore they are his own. And if a government subsequently arises and issues coins, twenty of which come to be used by the same individual in lieu of the bushels of corn, it is evident that directly or indirectly, he has got possession of these coins by giving in exchange the bushels of corn or something else that was equivalent; and therefore the coins are as much his as was the corn.

But this does not suffice to prove, that the private bankers should go on taking men's money by their consent and nothing be done to stop it. If men consent to it, it is because they know of no way of obtaining paper and having the value of their gold besides; and the reason they know of no way, is because there is none provided. If there was no way of a man's recovering the value of his silver tankards and having the use of glass too, and if there was no dignity or splendour attached to using tankards rather than glass,—men, or great numbers of them, would give their tankards for glass to an individual that should set up the trade of a glass-banker, as readily as they now give their gold for paper. But it would only be for want of being furnished with a better way; and this way, if it de-

pended on an act of the government, it would be the duty of the government to provide, or it does not perform the office which is the object of its creation. The main object of the thing called a government, is to do for the public by means of a common action, those things which cannot be done for it by the operation of individual interests.

A case in point, is the institution of property. If property were to be in common, it would be in vain to argue that every man's interest in the promotion of the general produce would be the same that it is now. An individual's interest would be like the interest of sailors in a ship short of water, who should be sent to the water-cask to drink at discretion but with an exhortation to remember that they were interested in the holding out of the common stock. Every man knows that the fallacy in this, lies in the present gain of each individual from increasing the draught before him, being vastly greater than its visible operation on his final interest. A pint more to an individual, is but a drop a-piece among a ship's crew; but if every man drinks two pints instead of one, the month's stock must be expended in a fortnight. In the same way, if an individual takes a banker's one-pound note, the visible or ostensible loss to him by that particular act, is only equal to the fraction of a pound which is expressed by the portion of the currency he habitually employs, divided by the whole or forty millions; and upon such an inducement it is plain that neither he nor any other individual will act. The ultimate result however is, that the public is robbed of forty millions, which ought to have been divided among them in the shape of a reduction of taxes to the amount of the two millions which is the yearly value. If the government will not take measures, an individual cannot help himself, and therefore may as well take the banker's note as not. But this does not go to prove, that the government ought not to provide.

The proposal that the people should save their annual two millions through the operation of their government, has been likened to the pretences set up by monopolists like the East India Company, of the necessity for preventing individuals from entering into certain trades, and otherwise coercing them for their own good; and it has been inferred as a special consequence, that if a government should set up a National Bank, it ought at all events to leave individuals at liberty to take the paper of private bankers if they like it better. The defect in this comparison is, that in one case the decision is really left to the people, and in the other it is not. Is it for the benefit of the people that two millions a-year should be taken off the taxes and every man enjoy his share, or that the two millions should be served out to the private bankers on condition of their saving the

trouble of finding paper? This is the question proposed to the good sense of the public; and the East India Company does nothing that is analogous. The nearest it could come would be to say, "Is it for the benefit of the public that it should be allowed to trade in a way that *we tell them* they would lose by?" But who believes the *We*?

If it is once decided that it is for the good of the public that the two millions a-year should be saved, then the plea that at all events men should be left at liberty to do the other if they please, stands on the same ground as the plea that after the institution of property every man should have the right to declare off that chose. If it be once determined that a general good is to be obtained by uniting in a certain course, from that moment all that prevents the attainment of that good becomes an evil which the public has a right to suppress; and the plea that this implies a breach of private freedom, is as inoperative as a claim to the freedom of darting a dagger's point into all conceivable parts of space, though a neighbour's throat should happen to be in the way. The throat being in the way,—the fact that the private freedom cannot be enjoyed without evil to others being the result,—is the reason why the freedom becomes no freedom, and the indulgence a delict.

The "Bank of England" appears to have been pretty well beaten out of the luxury of secrecy, and has very little left to struggle for on that score. The country bankers also are too numerous and too strongly backed by public opinion, to give it the chance of enjoying any monopoly of what may be called the honest business of a banker. Why then does not the Government come down upon the contesting parties, with a demand that each shall confine itself to its proper business;—that "The Bank" shall give up dabbling in discounts, and the country bankers cease to rob the community by coining? And why does not "The Bank," seeing that it can do nothing else, come forward and beg of the Government to transform it into a worthy creditable organ like the Victualling Office,—a paper Mint where the proceeds should be fairly set down to the account of the community, and the directors go to heaven when they die, like men in other departments of the public service?

WESTMINSTER REVIEW, 1 October, 1832.

ART. XV.—*Address to the Landowners of England, on the Corn Laws.* By the Viscount Milton.—London; Ridgway. 1832. pp. 46.

THIS makes another, and from the quarter whence it comes a highly important and influential attempt, to induce the

landlords and other classes of the agricultural population, not to make fools of themselves by running their heads like woodcocks into the snare that is set before them by the enemies of the country on the subject of the Corn Laws. For, this time, it is not a pining manufacturer or starving operative, coming to represent how hard it is that he should be prevented from selling the labour of his hands on pretence of benefiting the grower of corn, or to ask the corn-grower what he will think of it if the manufacturers, who are two to one already and to a certainty will have the power of doing it in a year or two, should lay a seventeen years' duty on home-grown corn by way of reprisals for the robbery that has been inflicted on them;—nor is it a petty landlord who has the genius to tell his tenants, as one did in Yorkshire, that he will lower their rent, but on condition that it shall be raised again within twelve months after an alteration in the corn laws*;—but the noble heir to one of the first rentals in the country, who tells the corn-growers and they know it to be true, that he "has no interest but in common with them; all his temporal advantage is bound up with theirs; whatever is for their advantage, must conduce to his, and to that of those who are the most dear to him."

'FELLOW COUNTRYMEN,

'It is my desire to invite your attention to a question, the importance of which is acknowledged by all, though few, perhaps, estimate it as highly as I do.'

'I address myself to you, because it is through, and by you, that the alterations which appear to me essential to the welfare of the country, must be effected. Any material change in a system of laws, deemed by a considerable branch of the community conducive to its prosperity and security, ought rather to be carried into effect by the consent of that branch, than in the form of a triumph over it; and notwithstanding the interval, which seems to separate the opinions of men, concerning the Corn Trade, we need not despair of this result. That it must be attained, however, through appeals, (perhaps frequently made) to the good sense, and, I may add, to the good feelings of men, rather than by any overt attack upon opinions which others may consider as prejudices, but which they themselves regard as well founded, I am thoroughly persuaded. I am most anxious, therefore, that you should consider, whether you have seriously and comprehensively examined the validity of these opinions, and whether the arguments, by which they are defended, are sound or unsound. These

* The condition was, that the tenant should give a memorandum in writing agreeing that if any alteration should take place in the Corn Laws in the way of removing or diminishing the duties on foreign corn, the tenant should on the next following Ladyday (not being less than six months after such alteration in the laws shall have been in operation) return to the former rent, or else give notice to quit.

are questions of the utmost importance to our arriving at a legitimate conclusion.'—*p.* 1.

Lord Milton begins with asking, whether it is possible that it can be beneficial to *a nation*, or in other words to the individuals who compose the nation, to pay a high price for its subsistence. It is certain there are many who care very little about this; but the answer may make a valid reason why those *many*, in the failure of all gentler arguments, should be coerced by the *more*, as happens in the case of other enemies of the community. And the reason he gives why it cannot, is that admitting to any extent the increase of prices which is the result to the agricultural classes, it is plain that these classes must at the same time bear their share in their character of consumers, and therefore "the artificial excess, in the price of bread, is a clear loss to others; but the artificial excess in the rent and price of land, is not a clear gain to *them*."—(p. 40.)

This is one way of putting the case; though a number of items, as increase of poor-rates, &c. might be added to the debtor side of the account. And the fair question to ask the agricultural people is this;—Suppose the manufacturers had got a tax on home-grown corn (which would manifestly increase the demand for their goods in exchange for corn from abroad), would any of the corn-growers doubt Lord Milton's argument, when it was applied the other way?

But as was intimated before, the dishonest part of the corn-growers are not bound to mind this. They think they have got their hands into the manufacturer's pocket, and they mean to keep them there. What is to be done therefore, is to point out to the honest and sensible corn-grower,—the man whom God has made with more wit than to be a plunderer without examination of the probable consequences,—how and in what way it is that Providence has brought about and provided, that plunderers in this line like all others shall be but a short-sighted generation, running their heads into a losing trade, to say nothing of the knocks that may chance to them when two honest men come to set upon each one of their fraternity. And the way is this. It may be conceded that the great aristocrats who are born to the right of making us keep their children legitimate and illegitimate, may profit by the Corn Laws in those cases where the poor-rates do not increase faster than the value of the produce; because they have only to get more value for the rents of a given estate, and inasmuch as their children must at all hazards be found in certain incomes by the public, the greater value is worth more to them in the end. But though a common landlord may get a greater pecuniary value from his estate, this will not save his soul alive if the difficulty of pro-

viding for and establishing his children is increased in a greater degree at the same time. The whole country is in what Adam Smith called the "stationary state," in consequence of the prohibition of manufactures and commerce; and of this the effects fall upon all the landlords who are not of the porcelain clay which must be maintained by other people, even where their rents are not absolutely diminished by that increase of the poor-rates, which heaven has tacked to the landlords' tails as nature's check on their cupidity.

To that numerous class the farmers, and that still more numerous one their labourers, there is in like manner no difficulty in conceding, that the first effect of the Corn Laws was to make merry times for farmers. But are times merry now? Is it not plain that "bygones are bygones," and all that is left them is a fearful waiting for the natural punishment on cruelty and wrong? The Corn Laws got up a spirt of prosperity for farmers at their neighbours' expense, in the same manner as a spirt of prosperity for linen-drapers might be got up by an Act of Parliament that should prohibit the wearing of woollen coats. But that was seventeen years ago. The only consequence now left is, that there are perhaps five farmers where there would have been four, and that the five are much worse off than the four. If the five were as well off as the four, the farmers might plead that it would be all clear loss to go back again. But they are not; they suffer under all the difference that arises from the general state of the country being incomparably worse than formerly. Their children cannot all be farmers; and the Corn Laws have brought on a state of things where they can be nothing else. So sure as there is a Providence above, is it written that there shall be always ways in which those who wrong and defraud their neighbours shall in the end find out that they have made a rueful bargain. Yet the men who are thus robbing both agriculturists and manufacturers together, teach their followers to cry, that the agricultural interest is to be sacrificed to the manufacturing. The thief with his hand in another's pocket, calls out that he is going to be wronged, and that he is within an inch of being obliged to take it out.

These are some of the reasons why well-meaning and honest men of the agricultural classes should at all events pause before they decide that they have any powerful interest in supporting the present barefaced robbery carried on against the community. But for those who are neither well-meaning nor honest, there are other reasons that perhaps may weigh. *The robbed are two to one;* and is there anything in all human experience to lead to the supposition that they will bear the thing much longer? In struggles of this nature, the rule for the honest and

suffering part of the community, is exactly what it is in military operations against a piratical tribe. If the pirates will come to decent terms while they have any means of resistance left, treat them generously, forget old grievances, and try to arrange conditions which, while they secure you from the repetition of the evil, shall also consult the comfort of the opponents. *If they will not*, then, when you get the better, leave them not an ounce of powder nor a fathom of rope; eschew cruelty to their persons, but in a political sense, cause the ploughshare to pass over them and through them. This is the feeling at the present moment; and a revolution would be a cheap way, if there was no other, for putting down the intolerable evil. There must be universal suffrage, and will be, if nothing else will prevent the two from being plundered by the one. If the agriculturists have sense or grace, they may make a composition now, sufficient to secure all their honest interests. If they have not, it will be a sign they are destined by Providence to receive the just punishment of "rogues in grain."

WESTMINSTER REVIEW, 1 October, 1832.

ART. XVI.—1. *The Fall of the Constitution.* Blackwood's Edinburgh Magazine for July 1832.

2. *Duties of the Conservative Party.* Id.

WHEN a radical is weary and heavy-laden,—when he is bowed to the earth with a sense of his own infirmity or that of others,—when he is sick of exhorting his neighbours, or the hard-handed multitude will not move themselves aright,—then is Blackwood's Magazine like water-springs in a dry ground, or like the wondrous bone from which the prophet-warrior drank, and his spirit came again and he revived. If a point wants establishing, there it is; if a fulcrum is desired for another twist of the crow-bar which honest men have at last got into the strong-hold of their adversaries, there it may be looked for; if an honest captain of the Reformation is at a loss for something pithily conceived to put into the hands of any Warts or Bullcalfs he may happen to be drilling, there is his resource; and if a leader of higher degree is anxious to guide the movements of the masses upon the points where the enemy feels sorest or lies most open in his quarters, there is Blackwood like a large Cassini's map of the department, ready to show him bridge and obstacle, and give him all reasonable bases he can require for his strategy.

The constitution is fallen; Blackwood says so, and he must be right. It is very true. The abhorred thing which weighed on us and on our fathers like an incubus,—the lubberly

Jaggernaut with his head of gold and his belly of brass, whose feet of iron and mud at once bedaubed and crushed us,—has been stricken with a stone cut without hands, and is become like the chaff of the summer threshing-floors. Never was a mass of human iniquity so tamely put down, after so much pains to bluster and to threaten. History has no instance, of a party so well prepared and organized, being walked off the field by such a ragged regiment. For those who were most interested know best, how small was the organization, how feeble the union, in short what a collection of stones out of the brook in a shepherd's bag it was, that brought down the bullying Goliath, and as the boy translated ἀφάβησε δὲ τιύχε' ἐπ' αὐτῷ, "made his halfpence rattle in his pocket." The cause of this was simply one; that though the assailants were not skilful, they were many. The Tories never dreamed how they were hated, or knew to what a length had gone the demonstration, that they were every man's natural enemies, whom he was bound to quell when he was able, like vermin in his featherbed. And what the people have done this year, it is hard if they could not do the next, "or oftener if need be." It is not strength that is wanted, but guiding of the gully.

Hear what *duelos y quebrantos*—which was Don Quixote's dish on Saturdays, and must in English have been "bubble-and-squeak"—are made about the sons of robbers having lost their birthright. Men must have been sadly beaten, when they ululate in this sort.

'If any man had predicted sixteen years ago—&c.—it would have been thought that the heaven itself would fall before such a change could be accomplished. Yet we have lived to see all this come to pass. Within the tapestried chamber which still recounts the destruction of the Spanish Armada [*the Holy Alliance of old time*]; under the roof which covered the hall of William Rufus [*Mrs. Ramsbottom* *]; close to the sacred walls which yet contain the bones of Edward the Confessor [*will they curg an ague?*]; on the spot where Alfred [*the honest king*] established, a thousand years ago, the foundation of the monarchy [*which they made odious*], the triumphant destroyer has stood, and a peal of exultation broke from the Demons of wickedness on earth and in hell, at the fall of the noblest monument of wisdom, the firmest bulwark of virtue, that the blessing of God ever bestowed upon a suffering world.'—*Fall of the Constitution.* p. 55.

Now who were the dæmons, why did they exult, and what was it all about? Nothing more or less, than honest men not wishing to be plundered, and rejoicing over the probability that they had done something towards preventing it in future;—an

* See the clerical weekly organ the "John Bull," for the Letters of *Mrs. Ramsbottom*. "William thence called *Roofus*."—Added in 1839.

exultation such as the public feels when a knot of coiners or receivers of stolen goods is broken in upon by the police. And the "firmest bulwark of virtue," "the noblest monument of wisdom," what was it in the eyes of all except the concerned, but the largest joint-stock company of public wrong, that was ever got up in the annals of the world by bribing individuals with the shilling to assist in taking the pound from the community? There is no wonder in anything men say for themselves if they think that they shall profit by it; but it *is* wonderful that any men should think it politic to say such things as these, when the answer is so ready and so sure, and when they know so well what the simple unsophisticated opinion is they shall excite in the breasts of their opponents.

'Dreadful as has been the consternation, profound the grief, unmeasured the indignation, [*of the losing party, or as they chuse to call themselves*] of all the wise and the good throughout the land at this terrible revolution [*There* has *been a terrible revolution for your enemies. Mark that. You see what you can do when you chuse.*], it is not the part of those who love their country, and are resolved to do their duty to it while a plank of the vessel remains together, to give way either to hopeless dejection or unmanly despair [*Depend upon it, there will be no hopeless dejection, while any man has a shilling left that can be taken from him*]. There is a point of depression, says Mr. Hume, in human affairs, from which the transition is necessarily to the better [*and so at last we have found it*]; and though the observation has been repeated till it has become proverbial, it is in moments such as the present that we alone feel its truth.'—*Id.*

Mr. Hume was certainly right, as he has often been elsewhere; and it is well to find the Tories speak of him respectfully. The best scheme of plunder cannot last for ever; police-men will break through and steal, and moth and rust corrupt the most strongly guarded hoard. All human things are frail, and so is thieving. The enemy will get the upper hand sometimes; and the most the bravest can do in such circumstances, is to wait with pious patience for a turn of tide.

'The fond wish of the patriot and the hero [*meaning their predecessors*] in so many past ages, *Esto perpetua*, is now no more. The long glories of its steady and tranquil reign [*Not so very tranquil; it has had heavy rubs before, in* 1640 *and* 1688]; the matchless celebrity of its arts and its arms [*What were its arts? its arms, it may be presumed, were the people's*]; the steady growth of its industry [*as wool grows under shearing*]; the dignified and majestic tenor of its administration [*the Speaker's wig*]; the general freedom which it developed [*to the party of plunderers*]; the relief to suffering which it afforded [*in one place while it caused the double in another*]; the restraint to vice which it occasioned [*where the vice was against its interest*]; the religious institutions which it had created [*to impose upon the people*]—

all, all are lost. [*Strike up the song the shepherds heard, "Glory to God in the highest, and on earth peace, good will towards men!"*] Henceforth the country is a mere democracy [*Remember that, and do your duty*]; the steadiness of the patrician sway [*it was very steady*] is at an end, and in its stead the vacillating and unstable rule of the multitude is established.'—*Id.* p. 56.

There are things in this, some people did not know. It is what the cockneys,—good men some of them, and have been, since they eyeleted the royalists at Brentford in 1642,—call "refreshing." Heavy duties appear to have devolved upon the people; it is more necessary than ever, that they should not forsake "the assembling of themselves together."

This prospect, which, to those who regard only the fate of their own country, is fraught with such melancholy feelings, is the source of very different emotions to those who contemplate the progress of the human race. We have struggled long and resolutely to arrest the evil [*How kind*]; but the revolutionary spirit has prevailed [*Turn and turn about, is only fair*]; the rock of Sisyphus &c. The work is finished. Human madness and guilt have run their course [*Men will not bear it any longer*]; and the laws of nature are about to resume their immortal reign. We are soon to witness the long period of national punishment [*Hear that,—any man who shall think of sewing his handkerchief to the bottom of his pocket*]—to see delusion expire under the pressure of suffering and anarchy, sink under the fury it has excited, and ambition prostrated by the passions it had awakened. We are destined to see a nation which neglected and despised all the choicest blessings of Providence [*They mean the debt and the corn laws*], which ran riot in the fulness of national prosperity [*with grass in their stomachs when they were dead*], and was drunk with the intoxication of national glory [*and the chance of very little else*], sink and suffer under the worst instruments of the Divine vengeance, the lash of its own passions and vices. With their own hands they have pulled down the ancient and undecayed fabric which sheltered their fathers, and the old time before them—with their own hands they have written their sentence—with their own lips they have pronounced their doom. It was in the midst of the triumph of revolution, the riot of rejoicing, and the blaze of illuminations, that the handwriting on the wall appeared to the people of England; and while they were celebrating, like the Assyrians of old, their triumph over an imaginary enemy, their empire was taken from them and given to another people.'—*Id.*

Fine writing, fit for a candidate for deacon's orders; and wonderfully like the tone that makes schoolboys "hope the pudding next." Or it would suit Matthews's old Scotch lady; it has a metre. Poor Tories! poor frozen-out Tories! nobody thought the foxes would wipe their eyes with their tails so piteously. They were ill-used, they were; it was a hard thing for naughty men to stick their hands into their pockets, and say they should take no more, when they had been bred to it.

People were prepared for roaring and rage, but not for such a whine. There is no withstanding such appeals to the Dii Immortales; the Tory pathetic must move men and Mercury, to compass their Restoration.

'Dark and disastrous, however, as is the future fate of the British empire [*only think of it*], we do not think its case hopeless, or that, after having gone through the degradation, distraction, and suffering which must follow the destruction of the Constitution, it may not yet witness, in the decline of its days, some gleams of sunshine and prosperity. The laws of nature have now come to aid the cause of order; its usual suffering will attend the march of revolution [*What suffering? Has not all the good that man enjoys, come through what robbers call revolution?*]; . . . . . When it is discovered that all the benefits promised from it are a mere delusion; . . . . . the eyes of the nation must be opened to the gross fraud which has been practised upon them. Then it will be discovered that the aristocratic interest [*Think only, the privilege of keeping the aristocrats*], and the nomination [*Pretty for "rotten"*] boroughs, which supported their influence in the Lower House, were the real bulwark which protected all the varied interests of the country from the revolutionary tempest, and that every branch of industry is less secure, every species of property is less valuable, every enterprise is more hazardous, every disaster is more irretrievable, when its surges roll unbroken and unresisted into the legislature.'—*Id.*

The surges rolling unbroken and unresisted upon Mrs. Partington, for want of a bulwark of rotten boroughs to keep them out!

'The Constitution, indeed, is destroyed,'—

It is enough, if that shame be gone; the rest is bluster. It means to come back if it can; which it shall be the business of all good citizens to rear up children to prevent.

'In commemorating the fall of the Constitution, many reflections naturally arise as to the causes by which this vast change has been brought about, the consequences to which it is likely to lead, and the means of escape which still remain to the institutions and property of the country.'—*Id. p.* 58.

The causes on the Tory side are mainly reduced to the error of once giving way. It is the cause of all falls; if London Bridge could have kept out the first stroke of the pick-axe, the old stop-water would have been there still. Also "the reduction of the duties on beer and ardent spirits," which gave the people license to get drunk; in which condition they never voted for the Tories. "A furious and deceitful press;"—naughty press, ugly press. "Fierce and menacing Political Unions," of men able to take care of themselves, and meaning to do it. "The rural population outnumbered by the urban;

two-thirds of the inhabitants of Great Britain attached to the cities," and consequently not interested in the flagrant robbery of the Corn Laws. "The extension of the power of reading to almost all the youth of the lower orders." The "influence of foreign travelling upon our young men of all ranks." These are the distresses of the "Conservative" party, the storms that have crushed their gentle blossoms to the earth.

One thing is evident from all this,—that "Conservative" means thieves trying to keep what they have got, and "Revolutionary" means the party that is taking it away from them. It is time therefore there should be an end of affected horrors of revolution; we are all revolutionists, or all of us that are honest. It is time the people everywhere should lay to heart, how totally and entirely the cry of revolution is the whining of men who cannot keep their dishonest gains; how property, religion, order, in their mouths are only different instruments of fraud, variety of skeleton keys and picklocks, of which each may be tried where it seems likeliest to succeed.

Great light is thrown by the kindness of the enemy, on another important point.

'*Cætera quis nescit.* The Whigs returned to office on the promise of a creation of Peers to any extent to ensure the passing of the Bill, and the Conservative Peers [*Always remember the definition of* "*Conservative*"], though amounting to *a decided majority* of the whole House, retired to avoid the fatal exercise of the prerogative. The best and bravest, the first and noblest subjects of the Crown, [*who bought their seats in the House of Lords for five rotten boroughs a head,*] were driven into voluntary exile, to avoid the same destruction to the Upper, which democratic ambition had effected to the Lower, House of Parliament.'—*Id. p.* 73.

Here is the secret; teach it to the corporals, and tell them to explain it to every private in their squads. As long as the people and the honest aristocracy will hold together, they can make it necessary for the Crown to coerce the dishonest, either by diluting the House of Peers with men of creditable origin, or which comes to a certain degree to the same thing, by the threat of doing it. The borough-mongering peers are in a cleft stick; they have been forced to withdraw, and the operation may be repeated on them *toties quoties*, till the country obtains the object it will never lose sight of, an adjustment of the House. The main difference between one course and the other, is that the one must go by jumps. There must be a miniature convulsion, a chicken revolution, every time the bad blood in the House of Peers is to be brought to justice; and it is impossible, supposing things go on, that this should not in one way or other bring about the smoother measure of adjustment.

The Constitution being decidedly fallen, what are to be the "Duties of the Conservative party" afterwards? The wasps' nest being destroyed, blown up, and trampled on, what will be the policy of the poor singed creatures that crawl about and try to sting?

'Every thing,' they say, 'depends upon showing a bold front, supporting each other by the mutual exhibition of strength, and *exhausting the funds of the enemy*. That is the material thing—Strong in numbers, inexhaustible in abuse, indefatigable in activity, with stentorian lungs, brazen faces, and insatiable ambition, the Reformers are extremely *deficient in funds*. They can assemble 20,000 or 30,000 persons perhaps upon some topic of great popular excitement; but *try them with a subscription*, and the nakedness of the land at once appears.'—*Duties of the Conservative Party.' p.* 139.

There is truth in part of this. After being pillaged for fifty years, the pillaged are likely enough to be "deficient in funds." They must make up for it with what is not "funds." The revilement of the Reformers is only natural; it is what every man must expect, who has been in the habit of allowing himself to be plundered.

Their plans for getting possession of the nest again, are first, to work upon the ignorance of such of "the meanest class of householders" as they can persuade to think themselves interested in the robbery of the Corn Laws; secondly, to try to operate upon the trading and commercial interests, by offering them separately a shilling through the medium of taking two shillings from some of the others, and for these devil's wages they hope the commercial interests will sell their souls and bodies to the tempter; thirdly, to take in none but Tory newspapers, magazines, &c. and thereby threaten the others as the lieutenant of hussars did Hoby; fourthly, to sign Declarations, that the strength of their party being known, the honest men may run away; fifthly, to raise a joint fund to support "Conservative" candidates while there is a rag of plunder in the common pouch; and finally, which is the thing their enemies most thank them for,—

'Finally, let the Conservative party universally and firmly act upon the principle of withdrawing their business from all tradesmen whom they employ who do not support the Conservative candidate. In the manufacturing cities, which depend on the export sale, this measure may not have a very powerful effect; but in the metropolis, in the other great towns, and the small boroughs, it would have an incalculable effect. *If universally and steadily acted upon, it would be decisive of the fate of England.*'—*Id. p.* 143.

There was an agreement, an understanding, a compact be-

tween the sounder part of the aristocracy and what are called the Radicals, that a trial should be given to the working of the Reform Bill before any further innovation was demanded. Those who supported that compact, are personally responsible for not counselling a breach of its terms; and therefore it is time they should come forward, so far as in them lies, and say distinctly that the time is come, the *casus fœderis* has arrived. It has not been brought on by any act of the contracting party; for that would be foul play. But the common enemy through his acknowledged organ,—the same through which he called to arm against the people, and looked so silly when he found there were two sides to play at that game,—has given out in orders the execution of that particular tyranny which makes the demand of the *Ballot* a necessary act of self-defence. It was not written in the bond, that the Radicals were not to call for the Ballot if the Tories chose to bring on the necessity. *Here* is the necessity; let every man take the printed passage last given in his hand, and one and all demand the Ballot of their candidates and of the government. When the "respectable classes," the "higher orders," have anything to settle for themselves, they know vastly better than to expose themselves to the personal inconvenience that may arise from voting without the ballot. There is not a learned society nor a club-house that does not employ it; it is only when it is to be used for the protection of the industrious and the poor, that it becomes base, ignoble, below the dignity of human nature,—on all other occasions, it is the only thing that noblemen and gentlemen find noble and genteel. Lord John Russell says he will call for the ballot, *if*—Does he call for the ballot at his club, *if*—or does he shelter himself under it rejoicing that he finds it there already? A landlord in some part of the country has declared, that he will not allow his tenants to be canvassed. Now just reflect,—meditate for as long time as would soft-boil an egg,—on the gross absurdity and stupidity in a country calling itself free, of allowing the suffrage to men who are in such a state of slavery to other men, that those other men *will not allow them to be canvassed.* Could not the West-Indians have votes given to a few hundreds of their negroes? with whippers-in, they might be made to tell upon a sugar question. Here are many millions of good and independent men who are to have no votes because they fall below a certain pecuniary standard; and here are certain other men who are to have votes because a certain sum *goes through them* into the pockets of other men who will not allow them to be canvassed. Can any man of common sense go to bed under such drivelling, and not dream of the means of mending it? The people have only to will and to agree; and

they have leaders, some of whom know a hawk from a handsaw. It is true the Birmingham Union has turned out a paper-money hoax,—to make ten shillings worth the operative's five, and give him eight. On the which let us thank God for the good it did us,—and at one time it was a great deal,—and avoid the evil. But the people of England can go on, without being at the mercy of the bankers and master-manufacturers. Therefore every man that is not paid for being cheated,—*The Ballot!* Remember that while you are talking, your wives and children are starving, and the Tory aristocracy feeding their hounds upon your rations.

Lastly, Return the Tories' policy on them thick and threefold, where they happen to be in your power; refuse to house their corn, to card their wool; are you beasts and vermin, that everything is to be fair against you, and nothing in reply? Neutralize as much as possible their operations on the tradesmen, by dealing with those who support the people with their votes. "Many a little makes a mickle," and the custom of a hundred honest men may be as good on the whole as that of one plunderer. Treat the Tory party everywhere, as those whose meat and drink it is to rob you and insult you afterwards, whose riches are the pickings of your poverty, and of whom the clothes they wear and the food they fatten on have been squeezed out of the pockets of the industrious and the poor. If they offer charity, throw it in their faces; the world is past being robbed of the pound, by getting the shilling back in flannel petticoats. Deal with your enemies as your enemies. They know no scorn, like that of a man's belonging to the industrious classes; they hate you, despise you, curse you daily in their cups. Make them feel the weight of your numbers when you are able. There is all the difference in the world between originating a sneaking, stercoraceous policy, and making it recoil upon the authors. If the Devil pelts with assafœtida, we must return him his missiles, and fight him with his own stink. If you are afraid of your fingers, wrap it in this leaf of Blackwood and so send it cleanly. Do all this and act like men, and see how soon you will have your worst enemies howling for the Ballot.

Programme to the Westminster Review for 1 January, 1833.

The elections, have carried Antwerp without assault. Poll after poll was announced, and no relief. To such distresses, the stoutest heart must yield.

Will not the Whigs now protocolize a little in Portugal? Or

would it, perchance, be *propagandism?* What is the protest against *propagandism*, but protesting against teaching men that they ought not to steal? "*Hinder us from stealing if you can; but bar propagating your notions.*" Does the other side not propagate? Or has it not, in all countries, some choice detachments whose limited office is to direct men's opinions towards servility from their birth?

The dispute in the American States appears to thicken. Could not the parties agree to truck two wrongs, and be the better by the sum? The Northern States plunder the Southern with their Tarif; the Southern States scandalize the Northern with their Slavery. Both go to reduce the name and credit of America. No civilized nation, in these days, gives into the savage blunder of making one half the citizens rob the other, with a common loss besides;—they are all backing out. No man in a civilized country, comes recking from contact with Slavery, and expects to sit down with gentlemen. Might not a sensible statesman find a way to settle this?

The Tories in Great Britain are defunct; they cannot find themselves or one another. There may be one in Libya; or in the remote parts of Australasia, where their weaker branches have been located for various unexpired periods. But in Great Britain, they are not to be had; they are all vaccinated into "Conservatives." There wants but one more purge to clear them off;—*the Ballot.*

WESTMINSTER REVIEW, 1 January, 1833.

ART. IV.—*Report of the Secret Committee appointed to inquire into the Expediency of renewing the Charter of the Bank of England, and into the System on which Banks of Issue in England and Wales are conducted; and to whom the Petition of certain Directors of Joint Stock Banking Companies in England was referred; and who were empowered to report the Minutes of Evidence taken before them.*—Atlas Newspaper. Kraken folio. Sept. 23, 1832.

WHEN George the First or Second got into a heat with his Minister, and insisted on being shown the documents relating to a certain subject the next morning, the Minister obeyed, and when the King rose he saw three large waggons full of papers, parked beneath his window. Tradition says he consented to wrestle with the matter in an abstract. And so it must be here; for without it, there would be no better chance of verifying the scriptural hyperbole, that the world itself could not contain the books that should be written.

The first thing to be collected from this Abstract—for such it is, notwithstanding its covering a surface of paper that may re-

mind the spectator of the sea-monster "floating many a rood,"—is that on no one point, on which more or less information is found in the Minutes of Evidence, is the information so complete as to justify the Committee in giving a decided opinion*. Nothing could convey a more modest statement of the conjunct abilities of the Committee, or of the aptitude of similar combinations for giving an opinion on anything. Imagine William Cobbett directing thirty square feet of examination on half a dozen points and their collaterals, and being finally unable to "justify himself in giving a decided opinion on any one." His opinion might be wrong after all; and so might the Committee's. The miracle is not in the Committee's being unable to secure itself from the possibility of being mistaken; but in its labouring under an incapacity to include in thirty square feet of close brevier, the materials for committing itself to an opinion at all. Every man has an opinion, or can make one in a quarter of an hour,—a better in an hour,—a better still in a week,—and one still more precious in a month. The Committee, from the dates of the evidence, was sitting about three calendar months; it ought to have hatched, therefore, a three months' opinion. But perhaps this is wrong; under forms where "nothing is but what is not," it may be etiquette that a Committee should not have an opinion; it may be a fiction of law or policy, that thirty-one members and a chairman cannot in three months of incubation compass an opinion. It would be putting new wine into old *borrachas*, to think upon these things too deeply.

As long as the Bank of England pays in gold upon demand, it is impossible for it to keep in circulation a depreciated paper; but all the value there can be in this, depends on the degree of certainty that the Bank will continue to pay when people want it. Now one objection raised to a limited and inconvertible paper issued by the public for its own benefit, is that in case of political alarm the consequences might be—*nobody can tell what*. It becomes therefore of importance at all events to know, whether under the existing state of things the public has any greater security against this danger, whatever it may be. And on this point,—though of course the Committee has been unable to form any opinion thereon,—appears in the evidence of the Governor of the Bank, the following oracular statement.—

'Against political alarm and political discredit the bank can never guard itself. *It makes no preparation against a political demand for gold.*'

* 'On all these, and on some collateral points, more or less information will be found in the Minutes of Evidence; but on no one of them is it so complete as to justify the Committee in giving a decided opinion.'—*Report.*

From this, such men as *can* form opinions, may be permitted to collect one fact;—that the Bank habitually and systematically "makes no preparation,"—that it does not pretend or profess that "it makes any preparation," but avows that it does not,—for paying its paper in gold, in the event of anything that may be represented by the terms "political alarm," "political discredit," or "political demand." It is something to know this; for though the Committee of thirty-two could form no opinion on it, other people will. And one branch of that opinion will be, a conviction that against the consequences of "political alarm," *the Bank* does not pretend to hold out any remedy, but the moment the said "political alarm" arises, is prepared to declare its insolvency and refuse to pay. So far as there is any merit or importance in the notes being paid, we are doing business with a declared insolvent; we are taking the notes of a banker who protests that he is not ready for a run, of the only kind in which anybody cares a pin whether he is ready to pay or not,—who avows that if such a run arrives, the clerks have his printed orders beforehand (and here they are), to shut up shop. All of which it is well the public should know, if it is only for the sake of convincing themselves, that if they were to issue a limited and inconvertible paper for their own advantage, they would at all events lose nothing in comparison with the present paper which is issued for the advantage of somebody else, and which differs from being inconvertible only by the fact that it is convertible at all times except when people may be anxious to convert. This declaration of the Governor of the Bank, has weathered a point of immense importance in favour of a limited inconvertible currency.

The same witness is stated to have been asked,

'According to your description of the principle upon which the affairs of the bank are conducted, do not the directors of the Bank of England possess the power of regulating the whole circulation of the country?'

To which the witness is represented to have answered,

'The bank are very desirous not to exercise any power, but to leave the public to use the power which they possess of returning bank paper for bullion. *The bank has the power to extend or contract the circulation,* but the bank would never use that power; it would leave the public to act upon the bank so as to produce the effect in the end.'

It may be a bold proceeding to tell the man at the helm he does not box his compass aright; but if there is no error either in the Report or in the way of understanding it, the helmsman must certainly be mistaken if he means that the Bank has any

power to extend the circulation (in the proper sense of the term), so long as it is under an obligation to pay in gold upon demand. It can prevent the circulation (gold and paper together) from being ever reduced in quantity so as to cause the five-pound note to be worth *more* than the gold in five sovereigns; and if this is what it calls the power of extension, it is right. But if it means to take any merit to itself for not multiplying five-pound notes till they are worth *less* than the gold in five sovereigns;—if it thinks, or designs to allow country gentlemen to believe, that there is a yawning gulph where five-pound notes would be only worth four sovereigns and a half, and that the public is suspended over it in simple dependence on the virtue of the Bank;—then it is time to proclaim all this to be a mistake, and to maintain stoutly that the Bank is mystifying itself and country gentlemen, as much as the philosopher of Rasselas who thought that the guidance of the seasons was in his hands. The Bank may be virtuous above measure; but it must not be conceded that its virtue is the bar to a deluge of paper, when all the merit is in the obligation to pay.

Another point on which the Bank seems disposed to claim a disputable credit, is on its nostrum for regulating its issues by the foreign exchanges. Think only what superhuman genius! what complex ingenuity! The Bank regulates its issues by the foreign exchanges! who else could do anything so wonderful! what would become of us all if we had not the Bank to regulate the issues by the foreign exchanges! Whether the directors of the Bank do or do not mean to represent themselves as conjurors upon this point, must be settled by reference to what they say.

'The Bank of England is the only banking concern that, for prudential reasons, puts any check or restraint upon its issues. Country bankers give out notes in full proportion to the value of their securities. The Bank of England, however, is the only body that has knowledge of the actual state of foreign exchanges, and the only body (of course) that can regulate its issues on that principle. A demand on the bank for gold to be exported is the only criterion of an unfavourable exchange, and the inward flow of gold is the only indubitable proof that the exchanges are favourable.'—*Evidence of the Governor of the Bank.*

Now what does all this, when put with the best side foremost, amount to, but that the Bank does its utmost, like any other bankers, to put out as many notes as will be kept in circulation and no more; and where is the extraordinary merit in that? When in consequence of the fluctuations of commercial or poli-

tical transactions, an increased demand for gold arises on the continent, the Bank knows as well as a baby knows how to take its fingers out of the fire, that this is not the moment to increase its issues with any use; because the value of gold on the continent being raised, there must to a certain extent be a run upon the Bank for gold, for the purpose of employing it in the quarter where it happens to be in request. And contrarywise, when it foresees a glut or slack in the demand for gold on the continent, it is as sure as is a schoolboy that he may play when the master is away, that this is the season when it may launch out a little in the way of issues, without a prospect of their being immediately brought back for gold. But all this is nothing but what is common to man. A banker at Hull or Yarmouth must directly or indirectly be called upon in exactly the same way, whenever a fat skipper hears that gold will be a better article at Hamburgh or Oporto than anything else in which he can vest his venture; and the opposite. If the Bank of England by residing at the fountain-head of affairs has better opportunities for being thus weather-wise than a country banker, the only reasonable inference is, that it ought to make a corresponding reduction in the bargain it makes with the public. On this point therefore it is also of importance, that country gentlemen should not run away with the idea that there is some mystery connected with the imposing words "regulation by the foreign exchanges," which the Bank alone is competent to solve, and which in the absence of its scientific interference, would set the ale running from all the barrels in the country, or otherwise disturb the harmony of nature.

The Bank has stated distinctly, that by "an unfavourable exchange" it means "a demand on the Bank for gold to be exported;" which is the simplest form under which the phænomenon presents itself. The more complex form, is where it shows itself in the guise of a diminution in the quantity of francs (for instance) which will be named in an order of Messrs. Hammersley on Paris, in return for ten sterling pounds paid down in London in any way that is to Messrs. Hammersleys' contentment; and it is useful to trace this case to its connexion with the other. The North-American land-voyagers fell in with some tribes of Indians in the West, who called everything of which they did not comprehend the mode of action, *a medicine.* A compass was a prodigious medicine, and a double-barrelled gun one greater still. In this sense the variation in the rate of exchange is to most people a medicine; and the consequence is, that there is no lack of persons willing to make the most of the obscurity. The bankers' way of accounting for it, is by referring it to the comparative abundance or scarcity of bills drawn in one country upon another. It may be hard, as

before, to stay a man in his own profession; but still it must be maintained, that this *is not* the cause, but only the concomitant. The effect does not arise from the multitude and rivalry of bits of paper, but from the multitude and rivalry of the goods exported to the foreign country, by which alone they can finally be paid. Since every bill on a foreign country must be paid—if it is paid at all—by the transmission of commodities of some kind, gold and silver included; it follows that the amount of the foreign currency which will be expressed in the bill in return for a given amount of home currency, will depend on the amount of foreign currency which can be procured in the foreign country by the sale of the commodities purchaseable here with the home currency received. If indeed an extraordinary number of persons are wanting bills to be drawn on the foreign country at the same time, this is, so far as it goes, a sign that an increased quantity of commodities will be sent to that foreign country, and that consequently the prices of English commodities in the foreign market are likely to fall; and the tendency will be, to make a prudent man write down a smaller quantity of foreign currency in the order he will give on the foreign country in return for the home currency received. But the rate falls because there is the appearance of a great many commodities being on the point of being sent, and not because there are a great many bills; and if from extraneous causes there should be no fall in the prices of goods sent abroad after all,—as, for example, if there should just then be an increase of fancy for English goods abroad,—the rate of exchange will not fall, and would even rise, if the prices of English goods abroad should rise in defiance of the increase of quantity indicated by the bills. To remove the scene, if a captain of dragoons in India has an allowance of 300*l.* a-year from his father in England, payable quarterly in Lombard Street;—the rupees he will obtain for his quarterly bill on Lombard Street from an Agent in India, will be equal to the number for which goods purchaseable with 75*l.* in England can be sold in India, *minus* the number that will cover all necessary risks, expenses, and profits to the Agent. Hence, if an increase in the number of similar demands on the Indian Agents is attended with a diminution in the rupees proffered, it is not because of the multiplication of pieces of paper, but the multiplication of the goods which must be brought out and sold, *coute qui coute*, in the Indian market; and if from extraneous causes an alteration is taking place in the demand for English goods in India, the value given for bills on England will not be affected in proportion to the increase of their own number *simpliciter*, but by the compound result of this and the extraneous causes besides. And in like manner if there are other persons in India possessed of rupees

which they wish to exchange for bills available in Lombard Street, the Agents will in the first instance try to effect an exchange on receiving a reasonable commission for the same, by putting the bill of *A* who has money in Lombard Street and wants rupees, into the hands of *B* who has rupees and wants money in Lombard Street. But in so far as exchanges of this kind are not effected,—then the number of pounds shillings and pence which will appear in the bill on England that will be given for a hundred rupees in India, will be equal to the number for which goods purchaseable with a hundred rupees in India can be sold in England, with deduction as before. So that if pains-taking residents in India find to their dismay, that the rupee for which twenty years ago they could secure thirty pence in Lombard Street, will now only produce them twenty-one,—they may be certain that the effect does not arise simply from the increased quantity of remittances from India, which may or may not be greater than twenty years ago, but the main part of the reason is in the diminished value of Indian goods in England, through glut, discovery of other markets, or change of fancy,—in other words in the fact that the goods purchaseable in India with a silver rupee, would formerly clear thirty pence in England besides the charges for Agency, and now not more than twenty-one. It is always good to root up a mystery, and halloo the long-tailed things that start from beneath its cover.

But there is another side of the quotation last made from the Evidence, which is *not* the best, and requires further prying into. What is meant by "country bankers giving out notes in full proportion to the value of their securities"? and is it intended to assert that the Bank of England does anything different from the others? Here are two things placed in opposition to each other. Here is the "for prudential reasons, putting any check or restraint upon its issues," which is put forward as peculiar to the wise virgins of the Bank;—and here is the "giving out notes in full proportion to the value of their securities," which is stated to be the practice of those foolish virgins the country bankers.

Now *quære* whether the conduct of both sets is not precisely the same, and whether either can do any increased harm if they would. How far is it true, that country bankers will always "give out notes in full proportion to the value of their securities"? Every country banker knows that there is some experimental limit to the number of his notes the circulation of his neighbourhood will bear, as for instance a hundred thousand pounds. If then he was invited to lend another fifty thousand pounds of his paper, on undeniable security and good interest as for example five per cent;—will he con-

sent, or not? It will depend upon circumstances. If he lends the new fifty thousand pieces of paper, fifty thousand of the old will come back for payment, and he must produce fifty thousand sovereigns from some other quarter. Has he then fifty thousand sovereigns somewhere else, which are only paying him, suppose, four per cent? for if so, he may gain one per cent by the change. And the same with the question of discounting; except that the trouble of issuing and receiving paper will be of greater comparative magnitude. But whether the banker consents to lend or not, is a thing perfectly indifferent to the whole of the public except the borrower. Whether he does it or not, will not cause a single note of his more or less to remain in circulation. All that the banker can do, is to keep his given quantity of notes employed to the most advantage that from time to time may offer, by letting them come in from quarters that promise less. And all this is common to "The Bank." As long as it intends to pay in gold upon demand, it need not make the smallest conscience of not lending or discounting to the utmost that it can persuade itself to do. The public is perfectly willing to leave the matter in its hands; and will give it no credit for not doing harm where it cannot. If the Bank pretends to put restraint on itself for public motives, it will find few that it will convince. In the nautical proverb, "they may tell it to the marines, but the sailors will never believe it."

Many proofs are scattered through the evidence of the various witnesses, of the rate at which the knowledge of the principles of currency and a sense of its importance are advancing. One Director of the Bank (G. W. Norman, Esq.) positively states as one good effect that would arise from the periodical publication of the Bank's affairs, "the gradual growth of knowledge on the working of the currency;" the ultimate consequence of which growth will be, to give us *an inconvertible currency under limitation*,—the dispersion of the knowledge of the fact that the breach of such limitation is to be put down like any other felony, forming the only efficacious security for its preservation. On the important question of the profits of "the Bank,"—not meaning thereby the stones in Thread-Needle Street, but the animated beings wherever they may be, to whose use the profits are finally applied,—on the nature of the bargain in short, whether good or evil, fair or unfair, under which the *personnel* of the Bank lends its services to the public, the information is very meagre; and for this very reason the Paul Pry of the public should apply himself to detect the mystery. But on the great point formerly noticed, the information is invaluable. Words can hardly measure the importance of the avowal distinctly and unequivocally obtained, that whatever

obstacles, difficulties, or dangers the public may think it sees in a system of limited but inconvertible paper, where in case of panic or political alarm every man should be left to whistle for his remedy, and in fact have no remedy but in submitting to the temporary depreciation of the value of paper, or rise of paper prices, which the stagnation of business consequent on such alarm might bring with it;—that whatever bugbears a sagacious public may conjure up for itself upon this point, *they form a precise and accurate representation* of the prospect which the same sagacious public now pays the Bank heavily for providing for it; with the exacerbation only in the latter case, of the apprehended evil being brought on with all the concomitants of surprise, wonderment, alarm, and outcry of treachery and fraud, instead of being as in the other case, regarded as a natural and indispensable phænomenon, within the open and honest contemplation of the public, and of which every man had fully fathomed the origin and the consequences.

WESTMINSTER REVIEW, 1 January, 1833.

ART. X.—*Practical Rules for producing Harmonic Notes on the Violin, with a Theoretical Explanation of the manner in which Musical Notes, Natural and Harmonic, are produced by Vibrating Strings.* Composed and Arranged by an Amateur.—Bury St. Edmund's, Oct. 1831. London; Cramer, Addison, and Beale, 201, Regent Street. Music folio, pp. 13.

"THE exquisite manner in which Paganini has executed such varied passages on the Violin by means of Harmonics," has stirred up the dry bones of the practical musicians to desire to know something of the *rationale* of their art. The "Amateur" therefore is evidently to be thanked, who puts himself forward as the agent for dispersing information; and all observations on his work must be considered as directed by the wish to advance the accomplishment of his design.

After a Preface commencing with the words quoted in the last paragraph, the "Amateur" proceeds to "Practical Rules for producing Harmonic Notes," interspersed with examples in the shape of well-known airs with a line of accompaniment in harmonic notes; and then proceeds to "an Account of the Theory of the Vibrations of Musical Strings explaining the production of Harmonic Notes on any Stringed Instrument." The query upon which is, whether the "Theory" had not better have preceded, as being the natural and practically efficient key to the execution of the "Rules."

The whole theory or principle of finding and producing the harmonic notes is in reality very simple, and such as might be

communicated to any intelligent child in two or three short lessons. If the author of the "Political Register" had been born and bred a professional musician, (as among the possible freaks of fortune why should he not?), he would have set the hope of his family before him, and said,

"My dear little Son,"

"You are to get your bread by playing on the violin. It will therefore be exceedingly useful to you to know all that can be known about the harmonic notes; by which means you may not only get your bread, but be able to secure its being well buttered also. A violin-player is *worth* a great deal more, when he knows all about the harmonic notes; and in fact, since the appearance of Paganini, the chances are, that a player who does not know it, will be worth nothing at all."

"Do you know what an *aliquot part* is? I am sure you do not. If you have a cake or an apple, and divide it equally among your companions, whether they be *two*, *three*, *four*, or any other number; then the thing is said to be divided into aliquot parts,—'*aliquot*' being a word in the old Latin language meaning 'some certain number or other,' and implying here that the thing is divided into equal parts of 'some certain number or other.' But if you were to divide it among the same so that their shares should not be all alike,—or if you were to give each an equal piece, but there should be a piece left after all which was not equal to one of the pieces you had given away, but was greater or less,—then the thing would be divided into parts, but not into aliquot parts. Now then, my dear little son, you know what is meant by dividing a string into aliquot parts."

"Tell me now, how you would begin to show me the different places in which a string can be divided into *aliquot parts*. You would first show me the middle point, which divides it into *two* equal parts. Then you would divide the string, with your eye or with a pair of compasses, into *three* equal parts, and show me the two points of division between them. Next you would divide it in the same way into *four* equal parts, and show me the three points of division. And so on, for *five*, *six*, *seven*, *eight*, and as many more as you liked to go on with. These then, you would say,—both those I have made and those I might make if I liked,—are the points that divide the string into aliquot parts. And if you pleased, you might mark them by writing under each point of division the figure which shows how many equal parts the string is divided into,—as for instance a 2 under the point where the string is divided into two, a 3 under each of the points which divide it into three; and so on. And indeed it will be better that you should do this; for then

you cannot help observing, that sometimes more figures than one will fall on the same place,—as for instance when the string is divided into four, one of the marks 4 will fall on the same place as the division into 2; when it is divided into six, one of the marks 6 will fall on the same place that was previously marked 2, and two more on places that were marked 3; and so on. All of which will be wanted another time."

"Now if you touch the string gently with the finger at the distance of any aliquot part from the bridge, (mind I said *from the bridge*, not at *any* of the divisions into aliquot parts, but at the distance of one of them *from the bridge**), and at the same time pull the string or draw the bow across between this point and the bridge, you will see a curious thing. The string will divide itself into all the aliquot parts of which the point touched by the finger makes one,—into two, or into three, or into four, as the case may be,—and every one of them will move by itself, as if it was a little string held fast at the two ends; the sound produced being the same that would be made, by pressing the string down to the neck at the point touched, in the common way. If the divisions are few, as two or three, this may be seen distinctly enough by the eye. But where this is not the case, it may be shown to be the fact by laying a little bit of paper on the string when it is sounded; and if this is laid on any of the points of division into aliquot parts, whether on the one nearest the bridge or any of its fellows, it will lie still and not be thrown off, but if it is laid anywhere else, it will be thrown off directly, which shows, that the points of division are at rest, and the others are not."

"If you want to know how or why this curious thing takes place, I will tell you as nearly as I can; but remember I do not pledge myself that this is the reason, but only that I think it very likely to be the reason, and this principally because I know no other way in which it can be brought about. And this way is, that when one portion of the string is moving in one direction, as for instance from me towards you, the next portion of the string is moving at the same time in the contrary direction, or from you to me; and so with the other portions, whatever their number may be. In this manner it seems possible that the points of division should be kept at rest, and in any other manner it seems to be not possible; and therefore, since the fact is before us that the points of division remain at rest, I conclude that it is in this way it takes

* A writer in a weekly paper has attacked the statement on this point in a preceding article (on *Gardiner's Music of Nature*, Westminster Review for October 1832. See *p.* 295 of the present Volume, Note); manifestly not taking time to understand what was said.

place. This is what the *feelosofers* would call an inference. And because this sort of balance can only be kept up by the portions of the string moving bockwards and forwards (which the same sort of people call *vibrating*) in equal times or with equal quickness, and this again cannot take place unless the moving portions of the string are of equal length,—it follows that this sort of motion in parts or portions of the string, can only take place when those parts or portions are of equal length; which seems to be the reason why the experiment will only answer when the point touched is one that divides the string into *aliquot parts*."

"But this is not all; for there is a more curious thing still. And that is, that if you touch the string at *any other* of the points of division into aliquot parts, (by which I mean any other than the point of division nearest to the bridge), the string will divide itself in the self-same way,—always with the exception (now mind the exception) of the cases in which the point touched falls in with a point in some simpler mode of division that has gone before. For instance, you remember observing, that when the string was divided into four equal parts, one of the points marked 4 fell on the same place as the division into 2. Touching the string therefore in this place, must make the same sound it did before; which is a different sound from that which it makes when touched at the other two points of division into 4. And in like manner in other cases. But when this agreement with some simpler mode of division does not interfere, all the points of division on being touched produce the same sound. For example, if the division be into five equal parts, inasmuch as none of these will coincide with any of the simpler modes of division, there must be four points in the string, any one of which being touched will produce the same harmonic sound."

"But if you want to know how and why this still more curious thing takes place, I can only tell you in a roundabout sort of way as before. If you divide the string, for example, into five equal parts, and touch any of the four points of division you chuse,—you check and finally prevent the continuance of any motion at the point touched, though at the same time it would appear that the touching (which to make the experiment answer, must be very light) is not enough to hinder the *shaking*, or as the learned people call it the *vibration*, given at one end, from being communicated past the point of touch. If instead of touching the string lightly, you were to lay hold of it with a pair of pincers, then the experiment would fail altogether; the reason of which may be concluded to be, because the motion is prevented from being at all communicated beyond

the point laid hold of. In fact the art,—for there is an art in everything, from scraping the grains off a cob of Indian corn to sounding a musical string, whatever the difference in use and dignity of the two things may be,—appears to consist in touching the string in such a manner, and with such a degree of pressure, as shall allow the motion given by pulling or bowing, to be communicated past the finger, and yet shall check and finally prevent the continuance of all motion, or as it was called before *vibration*, that is not consistent with the point which is touched remaining at rest. Now if you consider carefully, you will see that the only way in which motion can go on and this point remain at rest, is by the string's dividing itself into the five equal portions, the movements of which shall balance each other as before described. It does not indeed follow, that because the motion could go on in no other way, it must necessarily go on in this; but we have the evidence of fact that it *does* go on in this, so there is something that makes it go on, whether we know what it is or not; and the knowledge of the reasons why it could not go on in any other, is at all events very useful to make us remember what the fact is that is finally produced."

"The next thing is to be able to tell what all the sounds thus produced are. Now you remember that when you were a very little boy, I showed you, that if you stop a string by pressing it down hard in the middle you produce its *Octave;* where the two sounds (of the original string and its half) are such sounds as are produced by a man and a child when they sing the same tune together, but in very different pitches of voice;—that if instead of shortening the string in this manner by the half, you shorten it by a third part, you produce the sound which musicians have called the *Fifth;* if you shorten it by a fourth part you produce the *Fourth;* if by the fifth part, the *Major Third;* if by the sixth part, the *Minor Third;* with a great deal more which it is not necessary to mention now;—and I told you too, that the intervals from one of these sounds to another were not the same, or such as to allow of beginning on any you please and making the others serve in the places they happen to fall in, which is attempted to be done by what is called *Temperament*, a thing that you as a violin-player should hold in as much scorn, as an invitation to cut off your two legs for the sake of trying how pleasant it is to hop on wooden ones. If then you want to know what sound any of the harmonics really is, you have only to do this;—Double the distance from the bridge to the nearest of the points of division into aliquot parts, over and over, till you get beyond the middle of the string; and then the harmonic will be the note thus arrived at, only raised by

as many octaves as there have been doublings. For example, if you touch the thickest or G string of the violin so as to bring out the harmonic at one-fifth of its length from the bridge, and want to know what note this is,—doubling this length once makes two-fifths of the whole string, and doubling it again makes four-fifths, and four-fifths pressed down in the common way make the *Major Third* or B; therefore the harmonic produced is B two octaves higher than the B on the thickest string, or the same sound as the first B on the thinnest or E string. And in like manner in other cases."

"The examination of all the different possible harmonic notes might evidently be carried a long way; and it would be very useful to do it if you were intended for a trumpeter, for all the notes on the Trumpet or Horn are harmonic notes. But for playing on the violin, as much as is given above appears to be sufficient. It will enable you to trace all the principal harmonic sounds, and in fact all that on the violin are of any practical use; for though there is no absolute end of the number of harmonic notes, inasmuch as you may divide the string into a hundred parts if you please, and then into a hundred-and-one,—yet after the division into five or into six, the sounds on the violin become so feeble as to be of no use except as matters of experiment and curiosity. And it will have this further good effect, that it will make you cease to marvel and to wonder, at finding the harmonic sounds on the same string grow sometimes deeper and sometimes shriller, as you move your finger from the bridge towards the head,—as if there was some mystery in it that anybody could not learn in half an hour when they set about it properly."

"Suppose now you could stop some tune (as for instance 'God save the King') on one string of the violin as for example the fourth, with your first or second finger, and at the same time always touch the stopped string gently with the little finger of the same hand at one quarter of the way to the bridge so as to bring out the harmonic note;—is it not plain that you would play the tune, only in the Double Octave, or two octaves higher than if played by the simple stopping on the fourth string? There is no doubt that this is very hard, especially for a little boy; it is almost as bad as playing on two violins at once. But still the thing can be done. And if instead of touching with the little finger at the *quarter* of the way to the bridge, you should touch at the third, the fifth, or the sixth of the way, you would bring out notes that were not Double Octaves to the sound that would be made by simply pressing down the first finger, but other sounds, which you have it in your power to calculate; all of which might by possibility be

very useful, but the other was mentioned as being the simplest. Harmonic notes of this kind may be called *stopped* Harmonics, as being produced on a stopped string; while the others may be called *open* Harmonics, as being produced on an open or unstopped string. If you asked me what is the use of playing anything in Double Octaves in this manner, or in any other of the harmonic notes,—I should answer, First, because these harmonic notes have a very fine and pure sound,—they do not squall like the sounds made by pressing the strings to the finger-board very near the bridge;—Secondly, because it is much easier to make the sounds in tune in this manner, than by trying to make them by stopping near the bridge,—for where the string is so short, the smallest error in the stopping becomes sensible in proportion;—Thirdly, because, (as it is not necessary to be always playing in harmonics), they may be mixed up with the common notes of the violin, and save an immensity of trouble in jumping from one end of the instrument to the other to find the high notes. Look, for instance, at an old-fashioned fiddler playing on the second string, and wanting (suppose) A *in alto;* and see what a leap he will make to find it on the first string, and what a horrible screech he will bring out after all, when he might produce the note in the most perfect tune and tone by only touching the second open string that he is on already, harmonically at a fourth of the way from the head to the bridge, or at the same place that he would stop D on the second string."

In some such way as this, it is conceived it would be very practicable to instil a *theory* of the harmonic notes, which should be highly useful as a stepping-stone to the *practice*. After this, the first proceeding would seem to be, to practise the pupil in playing easy passages in the harmonic Double Octaves, to wit by always touching harmonically at the quarter of the way to the bridge;—and then in the harmonic Octaves to the Fifth, by touching at a third of the way to the bridge (in which, if his fingers are too short for application in the commonest position of the hand, he must practise in one of the positions nearer to the bridge);—and after this, if chosen, in the harmonic Double Octaves to the Major Third, by touching at a fifth part of the way; and subsequently, to go from one of these kinds of harmonics to another, in any manner that may be deemed calculated either for practice or effect.

The author, in his "Practical Rules," writes a note (as for instance the lowest G on the violin), and then a note (as low C) above it, in the manner used for representing a chord; his meaning being that the string is to be touched harmonically in the place which would stop the C, and thereby produce [not

C, but] Double Octave G; and in the same way for the A, B, &c. in succession. It would appear to be simpler, to indicate once for all, that the desired notes are to be produced by touching the string always at the *fourth part* of the way from the first finger to the bridge; for this is the real principle on which the thing is done, and the introducing the C at all is only an incumbrance. Instead therefore of writing C in the manner of a chord, a better way would have been to write the Double Octave G, or as the music-masters call it "G above the lines," and in the same manner for the A, B, &c. that follow; adding some expression common to all,—as for instance the simple one of drawing a slanting straight line that should lie always *one-fourth* of the way from the lower set of notes towards the upper,—to indicate that the upper set of notes are to be made out of the lower, by always touching harmonically at *one-fourth* of the way to the bridge. And in like manner in other cases. Everything must have a beginning; and there can be no doubt that by the perseverance of different professors, babes and sucklings will in a short time talk of the harmonic notes, as familiarly as their playthings.

Answer to "an amateur."

(From the end of the same Number.)

The writer of the Article on *Gardiner's Music of Nature* in the Westminster Review for Oct. 1832, will be glad to be the agent of collecting and concentrating information on "the best construction of the Violin," or other subjects connected with the theory of sound, if any person interested in such pursuits will forward it to him, or point out in what direction it may be looked for with success. In the construction of stringed instruments, it is not clear that much has been done to determine with precision the effects either of magnitude or form. The forms theoretically connected with the phænomena of sound, are the paraboloid, and what may be called the parabolic prism; which, for small portions of the respective figures, do not extensively differ from portions of the sphere and cylinder. The effect of removing the tail-piece in the violin, and its agreement with the previous observations of Col. Macdonald, have been noted in the same Article. The treatise of Col. Macdonald further states, that advantage was derived from the use of a bridge of box-wood; but the writer of the Article on the *Music of Nature* has tried various substances and forms for the bridge of a guitar where the strings were fixed to the back of the instrument, as glass, steel, ivory, ebony, and fir, without finding any remarkable difference. The diminution of sound caused by the introduction of a tail-piece, might, he thinks, be estimated

at a seventh or eighth part; which is probably as much as the difference between a Cremona and a common violin.

The Article in the present Number on the Harmonics of the Violin, was intended to be "written in *plain* and very *clear language;*" and as such, may be agreeable to the Correspondent.

WESTMINSTER REVIEW, 1 January, 1833.

ART. XI.—*Reflections upon Tithes, with a Plan for a General Commutation of the same.* By George Henry Law, D.D. F.R.S. & F.A.S. Lord Bishop of Bath and Wells.—London; Rodwell, Rivington. 8vo. pp. 27. Oct. 1832.

A Reverend Father in God has come in with a flag of truce on the subject of the Tithes. Let him be treated with the best of everything; that he may go away with a favourable impression of the strength and good-humour of the side he came to parley with.

'That Tithes, are at present an objectionable, and impolitic mode of provision for the clergy, is a fact, very generally acknowledged,—and deplored.'

Good. There is hope for the Church; if she has been brought to deplore.

'It is due however to the cause of truth, and justice, to observe, that this circumstance has been in no degree occasioned, by the Ministers of our Established Church, but, on the contrary, is by none more deeply regretted, than it is by them.'

Not quite so certain. But a missive must not be sifted too hardly; he naturally speaks for moderate men like himself. Nevertheless there are recollections, of those but for whose raging, the Church might have been at this moment enjoying herself in Wright's or Dessin's hotel, instead of being half channel over in the very worst of weather.

'The present system has been alleged to be unfair, inasmuch as the amount of the value of Tithes is far greater now, than it was, at the time of their first institution. Since that period the produce has much increased from the increased expense and labour of cultivation. According, therefore, to the industry and capital expended on the soil, is the sum now received by the owner of the Tithes:—a mode of payment which, as it has formed the ground of animadversion, the Ministers of our Church would naturally rejoice at seeing altered.'

'Hence, the demand of Tithe must have very frequently put a stop to the increasing improvement of the soil. The public, consequently, as well as the proprietors are losers by the system.'—*p.* 5.

It is pleasing, to receive these admissions from the hostile side;—at least to those who in their hearts seek only justice and ensue it. This comes of political economy, and fighting out the question with stout old mathematics, turning neither to the right nor to the left for any man's interest or any man's desires. When the Bishop of London appealed to radical organs in the House of Lords and Lord King intimated his assent,—it was clear that on the point of Tithes the game was finished, and that there wanted nothing but well-meaning commissioners from the two sides to meet, and settle the whole to mutual advantage*.

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* Since so much has been gained on this point by the union consequent on standing upon mathematical truth, it is grief to see a valuable Northern ally bringing forward at this time the somewhat *arriérée* doctrine of Tithes being paid by the consumer in the price of corn.

The observations on the extracts from Professor Senior (Tait's Edinburgh Magazine, No. IX, p. 316), appear founded on not distinguishing between a *partial* diminution of prices (calculated elsewhere as amounting to fourpence a quarter, and arising out of the accidental fact of there being a small belt of inferior land that was kept out of cultivation by the tithe), and a diminution to the amount produced by deducting the value of the whole tithe. It is easy to confound these together; and it appears they *have* been confounded.

What Mr. Senior has stated is, that if Tithes were removed tomorrow, there would be a fall of prices to a certain amount (say, for distinctness, fourpence a quarter); but that this fall would only be temporary, and those who expected the consequence to be that corn should thenceforward to all time be fourpence cheaper, would be disappointed. He has not said that it would not be a good, as a dinner is a good; but he has said that it is only one dinner however good, and that a man will not go in the strength of that meat for ever. If he has endeavoured unduly to depreciate the importance of one dinner, he is wrong; but it is suspected the fact exists principally in the imagination of the commentator.

The conclusion that if Tithes were removed, their value would be deducted from the price of corn, may be traced altogether to defective and "præ-posterous" notions of the cause of price. The price of an article has no connexion whatever with the cost of production, except so far as the producers themselves operate upon the price by bringing a greater or less quantity into the market. If a man should bring corn into the market and declare with perfect truth that every grain of it had cost him sixpence to produce by some unheard-of process, he would not thereby persuade anybody to give him a penny more per quarter than the price of vulgar corn. If a man should find a vein of gold as easily dug as coal, he would not get a penny less per ounce than for the gold which is brought with great labour from Peru, as long as he did not pull down prices by sensibly increasing the quantity in the market. The wants of men and the necessity of dividing the existing stock, are what create prices; and the producer, instead of creating prices, cuts them down by always bringing into the market the largest quantity that will increase his individual gains.

If tithes were abolished tomorrow and rent also, it could not cause a given quantity of corn to sell for less in the market than before; and therefore the only consequence would be, that the tenant would be rent and tithe-owner, and put both contentedly into his pocket. But the opponent will probably say, that the fact of his pocketing these increased sums, would enable and induce him to grow more corn. And here is the error. The corn grown *now*, is precisely the maximum quantity which it is anybody's interest to grow; and this maximum will not be altered (except by the fourpenny matter so often mentioned) by swallowing up both rent and tithe-owner in the tenant. To ask him to grow more, would be to ask him to grow an increased quantity of corn for a less total return; and that he will not do. The mistake is in thinking, that be-

'An act for facilitating a "*Composition*" for Tithes, and of a nature somewhat similar to that above-mentioned [Bishop Tomline's plan of a Corn Rent], was brought into Parliament, during the last Session, by our most Rev. Metropolitan. By this measure it was intended to be enacted, that an Incumbent, "with the consent of the owners of two third parts in value of the Land subject to Tithes," should appoint Commissioners, and make agreements for a Composition Money, to be charged for any term, "which did not exceed twenty-one years." But this Bill for *Composition*, appears to be in one, and that a most important point, far less eligible, than the Bill for *Commutation*. By the latter Tithes are commuted, and without any prospective alteration. By *Composition* the ascertainment of the value of the Tithes, would be an evil continually recurring. Thus would all those feelings be kept alive, which form the ground of dissention between the Clergyman and his Parishioners, and tend to diminish his means of doing good among them.'—*p.* 9.

And thus also, which is as important as the other, would be virtually secured the continuance of that pressure upon agriculture, which it is one of the first objects of a Commutation of Tithes to remove. All struggles for prospective valuations, are struggles for indirectly preserving the right of condemning a belt of inferior land to sterility, and preventing the application of a portion of culture to the rest. It is very agreeable, therefore, to find the present *parlementaire* distinctly giving up this point.

Corn-Rents and temporary commutations being thus disposed of, the author proceeds

'to propose that mode of remuneration for the Clergy, which, after a long and anxious consideration of the subject, appears to himself to be the most secure, the most unvarying, and, in every point of view, the least objectionable plan, for a general Commutation

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cause the tenant is to have more money, he will grow more corn. And its foundation lies, in the want of clear ideas of what it is that stops the increase of corn where it does, under the existing system. If the tenant should find some morning, that his landlord had died and left him the estate, or a lay tithe-owner the tithe, would he set about growing more corn on the land in consequence? Not a grain; except, in the case where he became owner of the tithe, the quantity christened "*fourpenny*." And the same answer may be made to the plea, that though the remission of tithe on one farm might enable the owner of the land to add to his rent, the remission on *all farms* would not. It would not be anybody's interest to grow a grain more corn than before;—*excepting the "fourpenny."*

The argument from the price of corn in a new country, is only, as before, a mistaking of the rise of price consequent on the operation of tithe upon the land kept out of cultivation by it, for a rise equal to the value of the tithe on the whole land which then or at any future time becomes exposed to its operation.

By "ultra-Malthusianism" and "Malthusianism run mad," is supposed to be meant the disposition to disparage certain advantages on the ground of their being temporary; as if human life was not made up of the accumulation of such. This tendency has been commented on in the case of one of the authors mentioned in the article from Edinburgh (Westminster Review for July 1832, Art. 1. See *p.* 195 of the present Volume); and is not known to be attributable to any of the others.

of Tithes. And this is—by a *Commutation in Land:* the arguments for, and against which, he will now proceed to consider.'

'In the first place, then, an allotment of land in lieu of Tithes, would at once put an end to all those adverse interests and feelings, which so frequently occasion a collision between the Clergyman and his flock. Whether the rent be paid to the Clergyman, or to any other Proprietor, can make no sort of difference to the parishioners: except, indeed, that terms, somewhat more moderate, might be expected, and would probably be obtained, in the one case, rather than in the other. Experience, we think, without any charge of partiality, would bear us out in this assertion.'

'In the next place, Land, in a great degree, regulates the price of all things else. According to the amount of land possessed by any one, is the relative place which he maintains in the ranks of society. Ages, after ages, may roll away; whilst the Lord of the soil still continues to retain his pristine influence and station. Thus, the proprietor of the Church Allotment also, would, amidst all the changes of time and circumstances, be equally enabled to preserve his relative condition in the Community, and to throw around his family all those means of respectability, those proprieties of appearance, which the due upholding of the Clerical character so obviously requires. The parishioners moreover would look up with increased respect to a Clerical Proprietor of the soil, who lived among, and had the means of letting land, and dispensing favours to them. Thus, might industry be rewarded, and merit brought forward. Thus might the preacher of the Gospel illustrate, by his life, the precepts he delivers; and prove himself to be, both in word and deed—a Father to his People.'

'That a change of such national magnitude and importance, could not be accomplished without very considerable difficulties and objections, is what every one at all conversant with statistical subjects must be naturally led to expect. The obstacles however which present themselves, are by no means insurmountable. One, among others, which has been most strongly urged, is, the throwing so large a quantity of land into *mortmain*. But a greater degree of weight has been given to this objection, than what, in fairness of reasoning, it is justly entitled to. The main, indeed the sole object of the Legislature on this point should be, to provide, that the earth be rendered as productive, as, in its nature, it is capable of being made. The intention of the Mortmain Act was, to prevent the Clergy from availing themselves of the superstitious feelings of the people, and thus too much augmenting the revenues and power of the Church. This principle however, would in no degree be infringed upon, by the adoption of the proposed plan. Neither can any fair argument be raised, against land being vested in the hands of Churchmen, which might not, with equal weight be advanced, against its being accumulated in the hands of any lay proprietors.'—*p.* 10.

It is possible that in a stage of society where the division into landlord and farmer was less distinct than at present, loss

and evil might arise from land accumulating in the hands of parties who are likely to cultivate it carelessly or imperfectly. But since the improvements given to the invention of tenants, it may be suspected that the outcry about *mortmain* is a tinkling cymbal. The Fellows of a College, for example, may not be as keen landlords as devised the Board of Agriculture. But what follows, but that their tenants have the benefit? It would be found on inquiry, that a college farm is a thing quite worth handing from father to son; which does away with the possible objection, that tenants not looked after will exhaust the land. A landlord may exhaust the land, if he likes; and why should such a tenant do it any more than a landlord? Before, therefore, it can be shown that *mortmain* of this kind causes any general damage, it must be proved that the tenants of the mortmain are to be inferior in knowledge and conduct to other managers of land.

'Another objection has been brought forward, from the supposed difficulty of procuring a sufficient quantity of land in each parish, in exchange for the Tithe. That in some parishes this obstacle would exist, there can be no doubt. The fact however is, that the want of land has never yet formed any bar to a Commutation, whenever this mode has been agreed upon by the legislature. Where however, land cannot immediately be procured, the amount of the sale of Tithes might, in the mean time, be invested in the funds, and the interest of the same paid, by his Majesty's Commissioners, to each Parochial Minister.'

'Neither is it at all necessary, that the land to be purchased should be confined to the parish itself. One thing only appears to be requisite, that a sufficient quantity of Glebe be procured, for the convenience and cultivation of the Parochial Incumbent. The main purchase might, without much inconvenience, be situated at some little distance from the parish.'

'The real value of the Tithes would, we doubt not, amount to a sum, far exceeding the computation at which they are generally estimated. But nothing unreasonable would, we have just grounds to believe, be expected by the Clergy. With much greater pleasure would they receive a smaller remuneration, cheerfully paid, rather than a much larger amount, advanced unwillingly, and with discontent.'—*p.* 13.

'In the last place, it may be objected that the proposed Commutation will not be acceded to by the Proprietors of land. The answer, however, is clear and conclusive. The Proprietors of estates will be determined in their acceptance or rejection of the terms proposed, by motives of self-interest, and by those alone. Now the amount which they would yearly save, by the non-payment of Tithes, would certainly exceed in value the annual rent of that proportion of their estates, which they might deem it advisable to sell, for the redemption of their Tithes. On this point, therefore, independently of all other

considerations, there can be little doubt as to the ultimate decision of the Land Proprietors.'—*p.* 21.

This appears to be a correct abstract of the Bishop's proposal. It may be considered as identical, as far as it goes, with Professor Senior's; though that contains further details on the mode in which the management of such lands might be advantageously conducted*.

All this seems perfectly fair and well-meant; and ought to be met in a similar spirit. There is no fraud visible in it, above, below, nor between the folds. In this way there is no doubt that the economical as well as the moral evils arising from the peculiar form in which the provision for the Church is levied, might be done away and leave a surplus of pecuniary profit to be divided among the parties concerned. On a rough estimate, 25,000*l.* a-year has been stated as what the landlords and the church might divide between them if they could agree; and 475,000*l.* a-year among the consumers besides, till they take it out in population †. Without standing on the exact amount, it is clear there are advantages of both these kinds to be made upon the spot. And the idea of refusing to accede to a proposed abatement of an acknowledged evil, on pretence of at some future time being enabled to effect the removal of a greater,—is one to be utterly scouted, or at all events turned over to that extremest *coda* of Radicalism, which is always found wriggling in every direction that it should not. The test of a good Reformer, is that he is one that will reform when he may. If the opposite side gains by getting rid of its τὰ σαθρὰ or rotten parts, *he* gains by the tendency which one reformation carried, has to make footing for another; and the mean resultant, is the public good from the point conceded.

The same advantages might be obtained by vesting the commutation-money in other ways than land; as for instance in the funds. But the truth is, that the fundholders want propping and not weakening, and would not at this moment think themselves strengthened, by having the Church put into the same boat.

After the symptoms that have appeared, the commutation of Tithes may be considered as a thing settled. Within a year or two, the landlords will be sending a deputation to state their sufferings from the Corn Laws; and in a little more, it is probable the West-Indians will be twitting the government with the tardiness of its measures for relieving them from the existence

* See Westminster Review for April 1832, Art. 8, on *Improvement of Condition of the Clergy*. Page 93 of the present Volume.

† *Id.* Page 86 of the present Volume.

of Slavery. *Così fan tutti;* and the inference from it is, that it is time to be prepared with a system of moderation and fair-dealing, and bring that kind of spirit to the fore, with which a failing side can decently negotiate. There is often one victory in the field, and another after. As for the sackers, the clean work makers, the "booty and beauty" men, if such there be, they must be kept in their quarters by those that know how to handle them. Besides, are they not all our brothers, and those whom God has given to be bound up with us in one compact of good or evil fortune. Beat them, when it is necessary for the common welfare; but do not beat them and eat them afterwards.

WESTMINSTER REVIEW, 1 January, 1833.

ART. XII.—*Letters on Commercial and Financial Policy.* By Colonel Torrens.—Bolton Chronicle.—Globe, Oct. 8, 15, 22, 29; Nov. 6.

THESE are a series of papers addressed to the electors and inhabitants of Bolton, on "the means of relieving the distress of the people, and of giving a renewed impulse to the prosperity of the country;" weighty objects in whatever manner pursued, and glorious if well. And for further explanation the question is stated to be, "How can the Reform Bill be made to work well for the people? What measures should the reformed parliament adopt, in order to remove the pressure upon industry, to raise the wages of labour, and to increase the profits of trade?"

'There are two, and only two ways in which the comforts of the great body of the people can be increased. They are, the reduction of taxation and the improvement of trade. I propose to consider both. On the present occasion, however, I shall confine myself to a simple statement of those principles of commercial policy, by the adoption of which trade may be improved. The proofs and illustrations of these principles, together with my views upon the most effectual mode of relieving industry from the pressure of taxation, I shall reserve for subsequent communications.'

'Improvement of trade implies that more goods can be sold, at prices more remunerating. But is it practicable, by any legislative enactment, to extend demand and to enhance prices? I contend that it is. I am prepared to prove that the *quantity* and the *value* of British goods vended in foreign markets will increase or diminish as our commercial policy is regulated upon correct or upon erroneous principles. What then are the principles of commercial policy on the adoption of which the prosperity of the country depends? They are simply these. To *lower the duties of customs upon the importation of goods produced in countries which consent to receive British goods upon*

terms equally favourable; and *to prohibit, or to lay heavy duties upon, the importation of goods produced in countries which prohibit or lay heavy duties upon British goods.*'—Letter I.

This is a statement of the proposition in debate, that cannot be mistaken. It is not a representation that it might be politic to hold out the offer of a reduction of duties on foreign goods as an inducement to the foreigner to reduce his duties on English, and so endeavour to work upon his selfish feelings to persuade him to consent to increase the common good at two ends instead of one; but it is a representation that there is a loss incurred through our merchants trading freely with such foreign countries as in the existing state of the laws of foreign countries they would fix upon, and that this loss may be prevented by our own government's laying a fine upon the act of trading with such countries as in its wisdom it shall specify. The object, public gain; the means, preventing our merchants from selling and buying in certain places where they know by experiment they make a *more* gainful market, and forcing them to sell and buy in places where they know by experiment they make a *less*.

'The facts formerly asserted and now to be established are—That the errors of the government, in departing from the fundamental principles of commercial policy, have deprived the country of the advantages which our manufacturing superiority would otherwise have secured; have lowered the value of British goods in foreign markets; and mainly contributed to produce the distressing fall which has been experienced in prices, in profits, and in wages. I proceed in the first place to prove the principles.'

'Portugal receives British goods in payment for her wines; and consequently, the greater the quantity of Portuguese wine consumed in the British market, the greater the demand for British goods in the Portuguese markets. France prohibits British fabrics; and, therefore, increasing the quantity of French wine consumed in England does not extend the demand for British goods in France, but causes a larger amount in the precious metals to be sent from this to that country. To increase the consumption of Portuguese wines, is to increase the consumption of British manufactures; to increase the consumption of French wines, is to diminish the supply of gold, and to occasion a general fall in prices. It must, therefore, be the obvious policy of this country to cause the wines of Portugal to be consumed in preference to those of France, by laying light duties upon the former, and by imposing upon the latter the highest scale of duties which the intervention of the smuggler will admit.'—*Letter II.*

The inference from so much might be, that the argument was intended to be rested on a currency fallacy; and to that in the end it appears to return, though it diverges by the way. In any other light, to diminish the quantity of gold at home because it is the interest of traders to send it abroad rather

than keep it at home,—in other words, because it is worth more abroad than it is at home,—is not a source of impoverishment but of wealth, as much as it would be in the case of coffee, or of any other foreign produce. It would be very absurd to talk of prohibiting a trade to Russia in Mocha coffee, by way of penning up coffee at home, and thereby enriching the nation through serving the interest of coffee-drinkers. And the reason is, that it will either penn up nothing, or nothing that will not be bought for more than it is worth. Either coffee will be imported in quantity increased by the amount of the export, within an insensible difference either in quantity or price; or if there is a small increase of price, and a small falling short of this quantity, it will only be in consequence of the fact that more is got on the whole by the new state of things than by the old. But if it was urged that gold was in different circumstances from coffee, inasmuch as it is the common medium of exchange,—then this would be a currency fallacy. Nobody, except old debtors, has any interest against a fall of prices arising from an increase in the value of gold; and this interest is balanced in the aggregate, by the counter interest of the creditors. And, what is important to be added, the variation is exceedingly small upon the whole, and no greater than must take place in coffee or any other named thing, through the ordinary course of commercial speculations. Not an atom of any mentionable substance can be sent out of the country, without proportionally raising the value of what remains; the inference therefore ought to be, that not an atom of any mentionable substance should be allowed to go out of the country. On the wages of labour too, an effect is produced by diminishing the quantity of gold and raising its value; which is *in favour* of the working classes, on the ground that the odds are that their wages do not fall in nominal amount as fast as the intrinsic value rises,—in the same manner that a depreciation in the value of money is *against* them. Trade therefore is to be stopped, and the loss of its substantial profits incurred, lest an insensible fluctuation, which in the aggregate amounts to nothing, should take place in the value of such pre-arranged bargains as are expressed in gold. Exactly the same reason might be urged, for preventing the fluctuations that might take place in the value of bargains made for coffee.

But, as was stated, this does not seem to be further insisted on in this place; though there is a return to it in the end.

"No!" say the ultra advocates of free trade, "the foreign demand for British goods is increased by the consumption of French wines full as much as by the consumption of those of Portugal; because, as France will not give us her wines for nothing, when we import a greater

quantity of them, we must export a greater quantity of our fabrics in order to purchase the greater quantity of gold required by France in payment."

'On the correctness or incorrectness of this doctrine of the ultra free traders, the whole question of reciprocity turns. It will, therefore, be necessary to bestow upon it the most careful examination.'

'To make the question clear and distinct, let us suppose, in the first instance, that in our commercial intercourse with Portugal the imports of wine, and the exports of cloth, each amount to a million sterling; and let us assume that, subsequently, our trade with Portugal is suspended, and that, in consequence, we import an additional quantity of French wine to the amount of a million sterling, and send the cloth, which had formerly paid for the Portuguese wine, to South America, in order to purchase a million sterling in the precious metals with which to purchase the French wine.'

'The question now to be determined is this:—Will the cloth which was worth a million sterling when sent to Portugal to pay for wine, continue to be worth a million sterling when sent to South America to purchase an additional quantity of gold? If the cloth, when sent to South America for this purpose, continues to be worth a million sterling, we must admit that it makes no difference, with respect to the extent of the demand for British goods in the foreign market, whether we import wine from Portugal in exchange for British goods, or from France in exchange for gold purchased with British goods. But if, on the other hand, it shall appear that, when the cloth is sent to South America to purchase additional supplies of the precious metals, it ceases to be worth the million sterling which it was worth when sent to Portugal to pay for wine, then it will become self-evident that the doctrine of the ultra free traders is erroneous, and that the principles of commercial policy which I have propounded are correct.' —*Letter II.*

Now the possibility of the answer being favourable to the querist, depends entirely on the supposition that the merchants will voluntarily send the cloth to South America instead of Portugal, when *less is finally to be had by sending it to South America.* Upon the assumption of this, is founded the whole possibility of the interference of the government being of any use. If it be true that more is to be had by sending the cloth to Portugal, what occasion is there for the interference of the government? unless it can be satisfactorily proved, that the merchants have an innate substantial propensity to prefer the smaller gain to the greater. If it is *not* true, then the interference of government is directed only to force merchants to take the smaller gain instead of the greater, and as the schoolmen say, *cadit quæstio.* See therefore whether it is at all proved in the sequel, that merchants *have* such a propensity as described.

When England exchanged cloth with Portugal for wine, the con-

sumers in South America took off as great a quantity of British cloth as they were able and willing to purchase at the then existing prices. What can now render them able and willing to purchase a greater quantity? Nothing but a reduction of price. The South American market having been previously supplied with British goods to the full extent of the demand, an additional supply is introduced, and a declension of price is the necessary consequence; thus, then, it appears, with the fullest evidence, that by ceasing to purchase wine from Portugal with cloth, and pressing an additional supply of goods upon the South American market in order to procure gold to pay for the wines of France—it appears, I say, with the fullest evidence, that by this alteration in the course of foreign trade, the produce of any given quantity of British labour is made to command a less quantity of gold; the value of gold, in relation to all home-made commodities, is raised, or in other words, the price of British goods is reduced.'—*Letter III.*

The weakness in this, is in taking for granted without a shadow of proof, and contrary to all the experience of Christian men on such points, that the merchants *will go to South America* with their cloth at all, if the result is to be that they are to get less for it in the end than they might have got by taking it to Portugal. It is like saying, "For heaven's sake fine a man for going to sell his goods on the Surrey side; for if not, he will go and sell for sixpence, what he might have got a shilling for in Westminster." The whole inference that the merchants will go to South America and lose, is based on the unproved assumption that they will go to South America if they are to lose by it. And conversely, the whole inference that a gain is to be made by preventing the merchants from sending their cloth to South America, and forcing them by a fine to send it to Portugal instead, is founded on the parallel assumption, that the merchants cannot see though the government can, that they are sending cloth to South America at a loss, through mere stupidity in not sending it to Portugal without force, or in spite of force, instead.

If a man was to make these two assumptions without the question being involved in the mystical phrases of "reciprocity" and "free trade," it is not too much to predicate of him, that as the Chinese quaintly said to the "*Koutou*" embassy, "his success would be small." Till it is pointed out by what delusion or infirmity the merchants are practically to mistake the greater gain for the less and the less for the greater, there appears no substantial reason why the inference so simple and cogent from this source, is to give way to any collection of arguments of greater surface and inferior concentration.

'The ultra advocates of freedom of trade may, and I believe do, contend, "that in purchasing French wine with gold, instead of

Portuguese wine with cloth, it is not necessary to press an extra supply of British goods upon the countries of the miners in order to obtain an additional amount of the precious metals. The process by which England obtains the means of purchasing French wines may be as follows :—The gold and silver obtained by France in payment for wine cannot continue to accumulate there—it will raise prices in the French markets, will there check export and encourage import, and then pass off to some other country, say Germany, in payment for the foreign goods for which it creates an additional demand. As Germany thus receives the gold and silver paid by England to France for wines, in Germany prices will rise, export will be checked, and import will be encouraged; and in Germany, therefore, England will find an extended foreign demand, and will receive back again from thence, in payment for the increased quantity of goods exported, the specie drawn from her by France."—*Letter III.*

It is not known who the advocates are that advanced this. What has been advanced is conceived to have been the much more powerful representation, that all zeal in the government to prevent the merchants from purchasing French wine with cloth through the intervention of gold, instead of Portuguese wine with cloth directly, to their hurt,—is like the zeal of the serving-man who carried his mistress's ducks across the water by the necks for fear of drowning, and choked them in the passage.

The way referred to in the sequel, by which the increase of wealth is to be produced from the proposed prohibition, is through this country's being the *entrepôt* of the precious metals. The merchants therefore are to come and say to the government, " We have looked into our books, and diligently examined all the items, and beg to state that by carrying out cloth to South America we can make a profit, and pay our debts, and give our manufacturers wages, and continue them in employment, and all go on thriving together; and by carrying the cloth to Portugal we cannot make our own again, and must leave our debts unsettled, and turn off our workmen because we cannot pay them any longer, and all go into the gazette in a body,—or if it is not so bad as this, there is at all events an approach to it, and we pledge our character for knowing a sixpence from a shilling, to the fact that we and all that depend upon us down to the boy that holds a candle, are (errors excepted, and so far as we are judges of the matter) vastly better off by taking the cloth to South America than to Portugal; and we beg leave to assure your Honourable Board, that if we did not think so, we would beg in all humility to be allowed to go to Portugal instead. We know that by going to South America we shall bring down the price of gold with reference to cloth; but we assure you upon our honours, that we will not send a yard of

cloth to South America, longer than the gold we get for it can be turned into French wine that will sell for more than the wine we should get for our cloth in Portugal. We are sensible of the kind intentions of the government; but we entreat it to believe, that on this point we are quite able to take care of ourselves."

And the government is to reply, "Gentlemen, neither you nor the boy that holds the candle, know anything of the matter. You are in utter ignorance that this country is the *entrepôt* of the precious metals, and that consequently all your statement that you gain more by one trade than the other, is a mistake. You *do not* gain more. You are not the men who can tell whether you gain more or not. You were labouring under a delusion, when you thought you were gaining more; and your inability to calculate the effects of the country being the *entrepôt* of the precious metals, was the cause of the deception. Go over your books again and apply the correction for being the *entrepôt* of the precious metals; and you will find that when you were in the gazette, you were out of it;—that when you thought you were selling with advantage in South America, that country was really not in a state to give you any profit;—that though your books are finally loaded with more pounds than would have been procured from Portugal, pounds from South America are not as good as pounds from Portugal, and we have set out with showing you the reasons, why they should not be and cannot be." It is in this way that the Board of Trade is desired to battle with the merchants.

But perhaps all this is beside the mark, and the intention of the author was to state, that without entering into the partial question of whether the trade is of more or less advantage to the individuals engaged in it, there is a more subtile reason why it is hurtful in the main, and that this effect is to be brought about by a diminution in the value of gold. If so, as intimated before, it appears to resolve itself into a currency fallacy. At the same time it is necessary to avow, that the data have not been found sufficient for framing a clear idea of the nature of the argument intended. The statement of it has not the precision of those that have preceded; it is dispersed over too much space, and must be presented in a compressed form before it will be efficacious with the general. The nearest that has been arrived at, is a suspicion that it amounts to representing, that the willingness of the French to take gold, is a proof that they want gold and would give a great deal for it, and *therefore it is politic* to lay a duty of 20 per cent by way of checking the trade that would bring down the value of our gold in France. In other words, that because gold would buy us a great deal in France, we are to take care that nothing is bought with it,

because that would bring down the state of things, in which gold would buy us a great deal in France. What else is intended by "a new and unfavourable distribution of the metals and a consequent fall of prices," which the "one-eyed" ultra advocates of free trade cannot enter into,—and "maintaining a comparatively high scale of prices,"—is positively not understood. But of what use can it be to any of us, that a sovereign in England will buy no more than a half-napoleon in France,—if we are to prohibit ourselves from the advantage of carrying the sovereign to France and bringing back twice as much as could be bought with it here? If the conjectural explanation is right, it would be curious to see how a similar exhortation would sound in the ears of the trader when applied to other cases. "Gentlemen of the Leeds Cloth Hall, your cloth is in prodigious request in France, the French would give you almost anything you liked to ask; reflect then, Gentlemen of the Leeds Cloth Hall, how important it is to keep up this state of things, and how infallibly it would be destroyed if the government should allow your cloth to go to France, without imposing a 20 per cent duty on the French goods that must be imported in return."

If this is not the argument, the true one shall be applied to as soon as known; but the matter for the present is obscure.

(Another Article on three subsequent Letters, is in the Westminster Review for April 1833. See page 409 of the present Volume.)

WESTMINSTER REVIEW, 1 January, 1833.

ART. XVI.—*Third Supplement to the Article on the "Silk and Glove Trades" in the Westminster Review for April, 1832.*

THE object of the repeated Supplements to the Article named, is to gather up from time to time the objections issued against the theory of the *double incidence* of the extra price got up by means of duties and prohibitions.

The "True Sun" of 8 Oct. 1832, says,

'The theory of the *double incidence*, amounts to this. According to the *Westminster Review*, the loss which a protective duty causes, on every occasion of its operation, is not a *single* loss. There is a loss to the consumer, to the amount of the increase in price, which the protective duty in question, imposes upon him. About this extent of loss, there can be no doubt. But according to the Reviewer's creed, a second loss to the same amount, falls upon the trader, to whom but for the monopoly, the consumer of the monopoly-priced article, would have transferred the difference between the natural and the monopoly price.'

The Review said, that there falls a loss upon this last-mentioned trader and his connexions,—exactly equal to the gain of the favoured trader and his connexions, from the forced expenditure at their shops of the difference between the natural and the

monopoly price; and consequently the two, in the aggregate, balance each other, and leave the loss to the consumer a pure and uncompensated loss. And its object in this was to show, that it would not be fair to advance the gain to the favoured monopolist as any set-off to the loss of the consumer; and for the simple reason, that it had already been set off once, against a loss of exactly its own amount, to wit the loss of the *disfavoured* trader who loses custom by the process. The trick to be guarded against, was this. When complaint is made of the loss to the consumer, the common answer is, "Ah! it is very true; but then, you know, the gain to the monopolist! There *will* be these little fluctuations; and we must be content. It is clear that there is no loss in the aggregate; for the loss to the consumer on one hand, is at all events balanced by the gain to the monopolist on the other; and so, in the end there is no loss to anybody." The object of the Review was to show distinctly, that this is a fraud and a man-trap; that the trick is in leaving out the suffering of the *disfavoured* trade or trades; that the gain to the favoured trades whatever it may be, is balanced by the loss to the disfavoured, and that the result of this is, to leave the loss to the consumer standing as the final balance of the account; that there are two losses, to wit the loss to the consumer and the loss to the disfavoured trades, and one gain, to wit the gain to the favoured trades, and that since the two last are equal, the balance left is the other.

The Review also said another thing; which was, that the gain to the favoured trades and the loss to the disfavoured, were not only equal to one another, but were each equal in positive amount, to the other quantity in question, viz. the loss to the consumer. The reasons for this conclusion may be seen in the preceding Articles, and rest upon the fact, that the whole of the price of any object, is divided in the shape of wages and profits (with the inclusion in some cases, of rent or monopoly gain), among the individuals concerned in its production. But whether this was correct or not, would not affect the principal result, so long as it is conceded that the gain to the favoured and loss to the disfavoured trades are *equal to one another*. The "True Sun" does not deny that that they *are equal to one another*; though it is disposed to doubt their being also equal to the loss to the consumer. The consequence therefore appears to be, that even if this point were given up, it would in no way affect the grand result aimed at by the Review, which is that the consumer's is an unbalanced loss.

Put a particular case, and see how it will stand. Suppose a citizen's wife, before the imposition of a duty on foreign silks, to have been in the habit of wearing foreign silk to the annual amount of twenty pounds; and suppose that in consequence of

the imposition of a duty, she is obliged to procure the same articles from silk-manufacturers in England by the expenditure of twenty-five pounds. It is presumed it will not be denied, that the citizen, assuming him to be the keeper of the purse, must expend five pounds a-year less on something else. Suppose then he decides on sending notice to his tailor, that henceforth he must trouble him for three suits a-year instead of four, and hopes he will make them substantial to suit. *Is* the tailor a losing man or not? Put the question to all tailors, present or hereafter, and the trades connected with them, and let their opinions be taken on the point. And if they say Yes,—then let the question be put, whether their loss and that of the trades connected with them, is not exactly equal to the gain of the silk trade and the trades connected with the same.

Or if the citizen refuses his wife more than twenty pounds a-year for silk,—*she* loses the value of four pounds in quality, and the tailor, or somebody in his stead, loses four pounds that would have been to be expended on him if the citizeness had worn silk of the same inferior quality under a state of freedom. Whether the sum at issue shall be five pounds or four, depends on whether the citizen decides on dealing with the fraudulent silk-trade to the amount of twenty-five pounds or twenty; being 20 per cent upon either.

Hear then how the "True Sun" proceeds.

'To us, this second loss—this *double* incidence—appears pure fallacy. We admit the first loss—the loss to the consumer. And we admit a certain derangement in the channels of trade, consequent upon the interference by Government, between the consumer and the seller of a particular commodity. But *there*, it appears to us, the influence of the monopoly, terminates. The increase of price which the monopolist secures is not lost to the community, after it has found its way into the monopolist's pocket. He expends it, in the encouragement of some branch of trade, as certainly as the consumer from whom he received it, would have done. The same amount of nutriment to trade is, in all probability, furnished by the monopolist's mode of expenditure as by that of his customer—but the channels are different. There is, in short, a single loss—and a certain amount of inconvenience.'

All this is only throwing dust into the eyes of the tailors. Men never doubted, that the silk-monopolist will spend the money one way, *videlicet* upon silk-makers; but they said the tailor would have equally spent it another way, *videlicet* upon tailor's journeymen. None ever denied, that the gain to silk-makers by the sum's being given to the monopolist, was the same as would have been the gain to tailors by giving it to tailors; on the contrary this was precisely the thing insisted on, in all sorts of ways in which there seemed a chance of making it impressive or intelligible. None ever said that in the aggre-

gate, the gain to the monopolists joined to the loss of the tailors, (putting out of sight the loss to the consumer,) did not leave the community exactly where it would have been in the other way; on the contrary this also was a thing which all manner of pains were taken to persuade the public to believe. But the simple point asserted, and which the "True Sun" insists on sinking and concealing, is that *tailors, and all connected with them, lose by the arrangement.* It calls it an *inconvenience;* and of course the monopoly to the silk-makers is only a *convenience.* Here is one set of men struggling to take away their living from another set; but it is not to be a loss, but only a certain amount of "inconvenience." The one thing certain, and which all possible tailors are called upon, if they be men, to look to and see they are not deluded in, is that *tailors lose.* The prayer of the silk monopolists is, that they may be allowed to stop the money from the tailors on the ground that if it is not in the tailors' pockets it is in theirs, and therefore there is no harm done in the aggregate; and this very piece of foolish foul play it is, which the tailors or whoever else may be the workmen concerned throughout the country, are desired to have their eyes on.

The naked fact is, that the moment a trade or mystery, like the silk-makers, says "Give us a monopoly,"—it says "Give us leave to take the bread out of some honest man's mouth of the working classes, and out of the mouths of his wife and children, in addition to all losses that may fall to him in the character of a consumer besides;" and this it is that the working classes have been putting together their hard-earned sixpences to support and to maintain. If indeed the plot was confined to the monopolists, then it was like other jobs, and there is no more to be said. But if a single working-man who was not of the monopolists, was induced to add the price of a day's labour,—he stands as a wronged man, and must only learn to know his friends from his enemies better another time.

The "True Sun" of 29 Oct. proceeds to attack the system of Free Trade generally. It gives the two first and the eighth and ninth paragraphs, of the Article on "Free Trade" in the Westminster Review No. XXIII for Jan. 1830 beginning "The monkeys in Exeter Change," &c.; which, as being in many hands already, cannot be again copied here.

'In these paragraphs, are concentred the germs of all the fallacies which disfigure the reasonings of the supporters of our free trade system.'

"Suppose," says the Reviewer, "that every individual in the community was a producer of some kind, and that every one had a 'protection' for his particular trade. *What would be the result, but that*

each would steal something out of his neighbour's box, with a general loss to be divided among themselves, in their character of consumers,' &c. There cannot, we apprehend, be a grosser error, than that, which this assumption of the Reviewer, involves. If every individual in the community was a producer—and if every trade was protected—we deny that there would be, *necessarily*, any loss. The protection to each trade, could have no other effect than to raise the prices of the products of that trade—and as all men are, by the supposition, traders, the rise of price in each department, would be only nominal. What would it signify, that the baker added a fourth to the price of the bread, with which he supplied his customers, providing the butcher, the shoemaker, the tailor, and every other producer, added to their prices, in the same proportion. "Protection" in such a case, would leave each trade undisturbed—"protection" would be a clumsy sort of machinery, effecting nothing. But, decidedly, such a protective system WOULD NOT, as the Reviewer contends, be attended "*with a general loss.*"

This is a mere currency deception; of the same nature as it would be to say, that if workmen of all kinds would agree with one consent to tie up their right arms, or take some other course that should reduce the quantity of work performed with a given quantity of time and exertion to one half, prices would rise everywhere alike, and everything be as it was before. There is one thing that manifestly would not be as it was before; and that is, that a pair of shoes would take two days to make instead of one, and a pair of breeches would take two days to make instead of one;—and therefore the artists who should exchange, or which comes to the same thing, each buy a pair of the other's wares at equal prices, for their own use,—though they might have the "True Sun's" comfort of seeing the money price of each altered in the same proportion, would have the further comfort of discovering, that they had each given two days' labour, for what, but for the invention of tying up their arms, they might have had for one. "Protection" is forcing people to buy the work of a man with one arm. It is saying to other people, "You shall not have the thing in the way you might have it best and cheapest, but it shall be artificially produced in some way that is worse. I am a man with one arm, in comparison of others you might have it from; and you shall pay me for working with one arm; and if we had one arm all round, it would be so much the better for us all."

The mistake, therefore, in this,—and a fearful one it is for an industrious poor man to have wasted his money in trying to circulate,—is in keeping back and denying the fact, that the working classes finally share in the damage, *to the extent to which they are consumers*. Perhaps they will be told, that they do not consume *much*, of goods of foreign origin;—that though they should be made to use bad iron in their tools instead of

good, and pay the price of good because it is English,—and live in houses made of bad wood instead of good, because it is English,—and pay for every ribbon their wives may wear, at the price of a best ribbon instead of a second-best, because the second-best are English,—it is not *much* of all these things they use, and therefore they are the better for losing on it. But is there nothing else of foreign origin, that is of a little more comparative importance to them,—for instance, *corn?* Are the men who subscribe against free trade, dull enough to believe that they are to have *their* dishonest protections, and the corn-grower is not to have *his?* And why should he not? According to the "True Sun," if there is half as much corn and half as much everything else, there can be no harm so long as the number of sixpences which jingle from one man to another are raised to all in exactly the same proportion. It is not the *corn* that man lives by; it is the jingling of the sixpences. Half a loaf a-piece will be a whole loaf a-piece, if there is only a certain quantity of money to pass from one man to another. Just as well might a ship with a fortnight's provisions on board, pretend to make it a month's, by an alteration in the quantity of the money that was to circulate from man to man between the decks, and shutting out supply from abroad.

'But the facts, as they meet our view, are very different from those assumed in the first hypothesis of the Reviewer. He is himself aware, that there are *unproductive*, as well as productive consumers—and he forthwith attempts to show that the productive classes would not gain by a protective system—"*that all that is given to one of them, is taken from another.*"

'In this view, again, the Reviewer errs as widely as he did in the former. A system of universal protection to trade—all men being assumed to be producers—would, as we have shown, be attended with no "general loss." A system of universal protection, where large classes are unproductive consumers, would, on the other hand, most undoubtedly have the effect of throwing all the burdens of the State upon these unproductive consumers. The immediate—the necessary effect of "protection," is to raise prices—but against this rise of price, in all the articles which he consumes, each producer would be defended, by the privilege, which, under a protective system, he would exercise, of adding to the price of the commodities in which he deals. *As affecting producers*, the universal rise of price, consequent on a protective system, would be only nominal—*as affecting unproductive consumers*—as affecting those who bring nothing to market—the rise would be real.'

Turn to the shoemaker and tailor who tie up each an arm and exchange; and see whether, as respects that particular

transaction, they have the smallest remedy from the mutual rise of price. Then take the case of, for instance, a glove-maker and a silk-weaver, whose wives buy and wear a protected ribbon and a protected pair of gloves; and see whether, as respects their own consumption, either is any more "defended" than the others, and whether each would not gain alike, by buying a French ribbon and a French pair of gloves for two-thirds the price, and having the difference to spend on something else.

'The Reviewer, however, not content with denying that producers would gain by a system of protection, proceeds, as if he felt instinctively, the unsoundness of that conclusion, to show cause, *why*, the unproductive classes should not be subjected to greater severity of taxation, than the productive.'

A clear shifting of the ground. Not a word was there of taxation at all. What was said was, that the "unproductive were to be robbed for love;" that there might be some show of reason if the industrious classes were to gain by it, but the present plan was to rob both productive and unproductive by the invention of employing labour to waste. Taking from the unproductive,—either with no benefit to the productive or with a loss to the productive besides,—has no earthly resemblance to a scale of taxation pressing unequally on the productive and unproductive; it is all a mystification. What follows therefore on this part of the subject, might be cut off as beside the mark. Some incidental expressions however demand particular resistance.

'Free trade exposes the productive classes to foreign competition:'

It must be utterly denied, that free trade exposes the productive classes to foreign competition at all. It exposes the monopolists who want to sell bad articles at the price of good, to the competition, not of foreigners, but of their own countrymen. The demand of the silk-monopolist, for instance, is, that in order to put three shillings into his own pocket, he may be allowed to take two shillings from the wife and children of the man who makes the cotton-twist that buys the cheaper silks in France, and one shilling from the bantlings of the tailor or other workman with whom the shilling would have been spent if it had been left with the consumer, and another shilling over again from the working-man, if he happens to be such, that has the impudence, the extravagance, to think of laying out a shilling in silk for a Sunday bonnet for his wife. And the excuse for all this unreasonableness is to be, that the next time the silk-monopolist takes four shillings from other people and

pockets three,—the odd shilling may chance to fall upon a duchess. The only effectual way to oppose this, is to set the suffering classes on their defence;—to ferret out the individuals who are to lose by every contemplated act of "protective" robbery, and bring them up to protest against the iniquity. If they are not men enough to oppose the taking the bread out of their mouths, they must wait till their resolution is sharpened by increased necessity.

'—free trade, while it leads to the greater cheapness of some commodities, throws thousands of artizans out of employment—reduces the general rate of wages—and adds to the burdens of all producers.'

Free trade leads to the greater cheapness of no commodities but those which the monopolist would cause himself to be paid for by the plunder of his fellow-artisans; by the token that it enhances prices in all the branches of trade which would suffer for the monopoly. Instead of throwing thousands of artisans out of employment, it prevents a thousand artisans of one kind, from throwing a thousand artisans of another kind out of work; and makes an addition to the advantage of the artisans and everybody else, in so far as they may be consumers of the goods that the monopoly desires to raise in price. Instead of reducing the general rate of wages, it freshens the rate in all the trades where men will voluntarily buy, and makes given wages worth more to the receivers besides. It adds to the burthens of producers, only by preventing one set of British workmen who *can* make what people want to buy, from being burthened with the support of another set who *cannot*. It brings no foreign labour into competition with British; the competition is between the first of these sets of British workmen and the other.

The "True Sun" of 30 Oct. repeats the incomprehensible mistake, of supposing that the question was of subjecting the productive and unproductive classes to a different "share of the pressure of taxation." When a writer falls into an error of this kind, the only resource is to hand him over to the judgment of his readers, and beg them to make the due deductions from their confidence in his results.

"There is no reason," exclaims our contemporary, "in saying a man shall be protected, while he is producing, but shall be robbed whenever he begins to enjoy." But will the Reviewer venture to contend that one man has a *better* right to be protected, "*when he begins to enjoy*," than another man has, to be protected, "*while he is producing?*" The productive classes ARE NOT PROTECTED, WHILE THEY ARE PRODUCING:—why then, should they consent to the unproductive classes being protected, in their business of enjoyment?'

In this there is a palpable double sense. "The productive

classes are not *protected*"—that is, allowed to make the useless robbery of one another which is recommended to them; "why then should they consent to the unproductive classes being *protected*"—that is, saved from being uselessly deprived of what they have, to see it thrown into the sea.

'That men do not, as the *Reviewer* contends, "labour for the simple love of labour, but for the love of the enjoyment, they may ultimately procure by it," is a very questionable position, in so far as the great body of the productive millions are concerned. That they do not labour for the simple love of labour, is undoubtedly true—but that they are cheered in their never-ceasing toil, by any prospect of "enjoyment," we must take leave, unqualifiedly, to deny. They labour to escape starvation—and each successive day calls them to renew the struggle with their gaunt and inexorable enemy. When, therefore, the great mass of our fellow-men are denied "protection," while engaged in those processes of production, by which the whole community are supported, it well becomes us to pause, before we accord protection to the classes, whose business is merely "enjoyment."'

The proposal here to the working classes is simply this. "You do not enjoy enough; therefore let it be enacted, that nobody shall enjoy at all." The remedy is an odd one; and is specially recommended to the notice of those millions of industrious men, who notwithstanding the light of the "True Sun," are still of opinion that by a decree against all enjoyment, they might have something to lose.

'The effect of an arrangement, like that to which the Reviewer so scornfully alludes—an arrangement by which the "hard-working citizen should be protected," while "those who retire upon their savings" should be "robbed," would, we apprehend, have many admirable consequences. In the first place, it would tend to lessen the number of those, who do retire from active labour—while it would augment the mass of capital employed in the business of production. In the second place, by annihilating the unproductive classes, it would create a perfect sympathy between the governors and the governed. The unproductive classes have, hitherto, supplied us with lawmakers—and our laws have, accordingly, been framed almost exclusively for the benefit of the unproductive classes. If all classes, however, were reduced to the level of producers, the laws would speedily lose their taint of partiality, and the productive classes would not cry for "protection" in vain. The immediate effect might be to disturb, the few, in their business of "enjoyment," but it would at the same time lessen the pressure upon the many, and it would, ere long, add incalculably to the amount of general happiness. At all events, it must not be forgotten, that "protection" has been rendered necessary, by the misrule of the unproductive classes, and that if "protection" falls heavily on any class, it ought to fall on that class from whose rapacity it has sprung as an inevitable consequence.'

A short time ago there might have been some hesitation as to the policy of giving increased publicity to the existence of a school of political economists, such as the above passages demonstrate. As it is, there is nothing to be done but wish the Conservatives joy of their allies. The strongest confidence may be felt, that the reasonable part of the working classes will always be numerous enough to keep the unreasonable part in order. Yet the phænomenon forms a valid reason, for drawing closer the union between those of the middle and industrious classes who have property to lose, and the honest aristocracy. The devil of plunder is abroad, and here is his cloven hoof. Those who comforted him, and those who were deceived by him, may settle their own affairs with one another and with the public; but there is no reason for withholding any portion of the opinion formed of the spirit they are tampering with. *There he is*,—robbery in a red nightcap, instead of a squirearchal hat and a qualification for a county. The saving classes and the honest aristocracy, so long as they can hold together, have got the central position *à la Napoléon*, and will be able to move down when need is, upon the plunderers great or little, at whichever end of the line they chuse to show themselves.

The statements of 6 Nov. amount only to a repetition of the assertion, that if men in general have half as much of everything as they might, they may be comforted by an adjustment of money prices.

'To a producer in England it must signify little whether he pays three shillings or two, for his gloves, providing he shall have it in his power, in case of paying a half more for the gloves he uses, of adding, in the same proportion, to the price of the commodities, in which he deals. The power of doing so, would, as we have shown, be secured to him by an efficient system of protection.'

The error in this, is simply in leaving out his loss, upon all protected goods of all kinds, he may happen to consume himself.

The "displacing of native labour" (24 Dec.), is non-existent; there is only a shift. The "legislative protection" the monopolist solicits, is against the home tradesmen with whom the money would be spent he wishes to monopolize.

To the poor men who have clubbed their little portions to support the Corn Laws and continue themselves in half a loaf, the only advice that can be given, is to get any of it back again if they can. To those of wider influence and greater knowledge who joined in encouraging them to the sinful act, the account to which these poor men will bring them before the public when

they find the end of their delusion, will be a correction in which the discomfort to the sufferers will be vastly overbalanced by the benefit to the community.

WESTMINSTER REVIEW, 1 January, 1833.

ART. XVIII.—*Considerations on the Policy, Justice, and Consequences of the Dutch War.* By Vindex.—London. Effingham Wilson. 1832. pp. 32.

"VINDEX" is a well known public character. He was the colleague of "Civis" during the greatest part of the American War; and afterwards joined with "Politicus" in opposing the French Revolution.

He is at this moment called from his retirement by the necessities of the King of Holland. He begins his advocacy, as need was, with a hit at Napoleon and the French republic; both, undeniably, great enemies of his principal.

'Very often (though hid under disguised forms,) ambition is the real cause [of war], as was the case with the wars of France under Louis XIV, and again under Napoleon, who made wars and conquered countries in order to parcel out kingdoms to all his relations; much in the same way as a short time previously the great Republic conquered little states, in order that they should, like Satellites, revolve with her in her orbit, or be incorporated with her, as might best promote her power and splendour.'—*p.* 3.

This is figurative and astronomical; but the best part about it is the opportunity it gives for refreshing men's memories on the fact, that the conquests of the French republic were the conquests of police-men over thieves; who when they have attempted and been foiled, are never quite content with the degree in which the victors follow them up into their harbours. They were the beating and trampling down, of the predecessors and allies of the same men who have just received so signal a defeat in the success of the Reform bill; of which it is confirmation strong, that the same nation, under no more modifications than are the inevitable result of the difference of times and circumstances, should be again found in close conjunction with the supporters of freedom here, and have contributed powerfully to that overthrow of the common foe, which on the former occasion was unhappily confined to the continental branches. And what the Republic left unfinished, Napoleon carried on; the more is the pity, that he should have cut himself off from the great source of strength, the loss of which, though the momentum of the machine continued for a dozen years, ensured his fall at last.

'But it would puzzle any one to assign a reason, good or bad, for our war against Holland. We have not even ambition to gratify, at least as far as we are concerned; for what then do we make war?'—*p.* 4.

A civil question demands a civil answer. The Vindicator shall be told for what we have made war.

Something more than forty years ago, a neighbouring nation attempted to mend its government. The classes that were living by the robbing of the public here, like wise men took the alarm; and joining themselves with all that was uncivilized, brutal, and of ill report upon the continent, attacked the nation that started the odious word Reform. The honest part of the English community did all they could to hinder it; but the honest and energetic part was then so small, that it was miserably defeated, and in various ways expiated the fault of ill success, some on scaffolds, some in exile, some under the hoofs of yeomanry, and all in plunder. On the continent, meanwhile, the success of the just cause was great; but unhappily an ardent genius forsook the rock from which he had been hewn, and a series of military misfortunes threw him into the power of the common enemy. That enemy murdered *him*, and taxed *us* in our bread. For a long time we lay defeated. Our allies were subjected to a pretender, by foreign arms; and *we* were told, that the state of Europe was gone by, in which it was possible to resist. A large portion of the existing territory of France, conveying with it the command of her principal natural bulwark, was cut off and given into the keeping of one of the subalterns of the nest of tyrants that weighed upon us. That subaltern was nicknamed for the nonce King of the Netherlands. The undisguised object, was to secure the submission of France, and through her of England, to the barbarian combination of which our Tory *clique* was district partner. The best things cannot last for ever; nor the worst. At last came the Three Days of July. The individual who first "*endossait*" the uniform of the National Guard, fired a train which communicated with the rapidity of light to England. Still, had the enemy been alert, he might have extinguished it; but years of non-resistance had caused him to wax dull. On a former occasion when France had for a time thrown off the foreign yoke, the English tyranny did not give the nation time to think, but assumed as a primary and uncontested fact, that by the attempt to throw off, the countries were at war. On the present occasion, they fortunately hesitated; the Tory blood had run thin, since the old and palmy time. A party on such principles, is vanquished the moment it becomes afraid to be

outrageous. A dozen men sent to the Tower with the vigour of the ancients, might have arrested the machine. But instead of that, the first communications from England were allowed to bear the news, that in England the die was cast, and nothing was wanted but to go on. A few weeks afterwards, the advanced posts of the barbarian powers were driven from Brussells. Again the rump of Tory domination temporized; while the feathered Mercury of the English Radicals was rolling *summâ diligentiâ* along the road to Brussells, and landed from the first steamboat with a representative of the Belgian insurgents. Here then was Belgium recovered from our enemies. A little week saw it torn from between the teeth of our oppressors, and restored to the situation of a bulwark to us and our allies. We of the great European family of freedom, had one and all approached the rampart of the Rhine. An important post held out for the common adversary. Meanwhile things had gone well in England. The junction of the popular interest with the honest aristocracy, had driven from office the conductors and supporters of the wars against European liberty, and established a liberal of 1792 at the helm of public affairs. The difference of two Great Britains was thus made; by algebra. The liberal powers proceeded in union, to complete the independence of Belgium by negotiation. The parties who might be called the actual belligerents, agreed to abide by the award; but the delays inherent in negotiation, gave time for the beaten faction in England to take heart of grace, and encourage the limb of the barbaric combination, which they had decorated with the name of King in Holland, to virtually refuse compliance. The liberal powers proceeded to act by arms; and the world was cheered with the two great tricolours floating in union. Years of dishonour were wiped from the British ensign by that single contact,—*Caraccioli, Ney, Napoleon;*—an honest man may look at it now, and think that at least it *is* not the flag of tyrants and of knaves. The land forces of France laid siege to the intruder's hold in Belgium, and pushed it with the vigour of men each of whom knew he was raising a bulwark against the invasion of his own hearth by the barbarian. The enemy defended himself neither well nor ill; that is to say, like a rabbit, he waited till he could be dug in to. The British Tories were beaten over again in Antwerp; for they were in it, and behind it, and round about it; the refusal to yield it altogether, was their work; their last struggle, the final effort of their hopelessness *. Every

* See the droll story of Lord Aberdeen's quoting by mistake in the House of Lords on the 26th of January 1832, a note to the Conference which was not issued by the Dutch plenipotentiaries till the 30th.—(*La Belgique et la Hol-*

French shot was a knell to the cause of public injury in England, and a sound of hope and confidence to the millions who had just conquered a Reform. Does Vindex now know, for what we were at war with Holland?

All these events are of necessity very agreeable, to individuals who began as many as four years ago, hoping against hope, to maintain the thesis that the Belgian bulwark ought to be regained for France*. Some wondered, and some exclaimed "What will these babblers say?" The end has in substance been obtained; we have nearly got Belgium, between *us* and the caste of kings. It is vain, however, to try to make all sides see things in the same light. The wolf that is to have his fangs drawn, will wince and howl, in whatever manner the process be begun. Those who love the reign of the barbaric powers and profit by it, will naturally grieve at seeing their lieutenant expelled from Antwerp. Men in such circumstances must not be visited too narrowly. Something must be allowed for human feelings and human disappointment. It is a heart-breaking thing, as has been elsewhere said, to be crossed in despotism; and the pang extends down to the lowest retainers of the cause. Let but any humane and considerate person place before himself the immensity of the change, and consider the draft that is made on the endurance of frail mortality. It is not every man who has lived to see the forces he thought his own in fee, employed to pull down his usurpations and build bulwarks against his hopes of their return. Such sufferings may excuse a little ill-humour and a little treason. Time was, that the Conservatives made great noise if a man was found communicating with a power at war, forwarding a trivial plan, or aiding in sketching a campaign or the defeat of the opponent's. But matters are changed now, and the trenches before Antwerp were filled with British Tories, whom nothing but French politeness hindered from stringing up as spies. All venomous things have their use, and so have these. The triumphant people of Great Britain know better than before, the faction with which they have to deal. They have had useful opportunity to learn, the abnegation of all law except their interest,—the *jura negant sibi nata* spirit,—characteristic of the party which they must either cut off from hope and harbour, or be their re-vanquished thralls.

'She [Holland] has done us no injury; she has taken none of our

lande. Lettre à Lord Aberdeen; suivie de la Traduction de son Discours à la Chambre des Pairs, et de Notes sur ce Discours. Par Victor De La Marre.—Bruxelles; Chez tous les marchands de nouveautés. Février 1832.)

* See the Article on "*Béranger's Songs*" in No. XIX of the Westminster Review for January 1829 (p. 36 of Vol. I of the present Work); on the *Desirableness of the Reunion of Belgium to France*" in No. XXII for October 1829 (p. 165 of Vol. I of the present Work); and others.

ships, though we are taking her's even without a declaration of war.'—*p.* 6.

Can anybody state, how many of our ships had been taken by the French republic, when our Tories in their terror of reform the first time determined to go to war;—or how many the second, when they went to war to avoid fulfillment of a treaty? Not that it follows, that to have taken no ships from us is a requisite towards making a just enemy; but it *does* follow, that to have taken no ships is not a sufficient circumstance to make a war that Tories should be allowed to cry out against.

'What has Holland done to you, that you should wish to crush her? Do you go to war for Belgium? What is Belgium to you?'—*p.* 7.

Everything. The interest you take the other way, is evidence that it is everything. Is it possible to see a Tory interest, and not to have an interest on the other side? You want the Cossacks in Belgium, to threaten France, and through France, us. It is the great *lunette* and outwork before the Channel, of the Reform that is behind it; and therefore we want to have it for our friends, and you for yours. The Reformers of England will give up the Isle of Wight, as soon as see Belgium in the hands of the Holy Alliance again.

'It is now insisted that Antwerp shall be French, or, what is tantamount, Belgian under French influence, and yet so jealous was this country before even of the Dutch, who never would and never could do it any harm, that they were not allowed to have either a naval arsenal, or a dock-yard, to build ships of war, nay, not even of the smallest size.'—*p.* 10.

If there is to be a government in this country, which is to exist only by forcing foreigners to forego the natural advantages nature may have bestowed upon their territories,—it will be put down by the refusal of the English people to support it in any such odious cause. If there is to be a war of conquest to take and keep Antwerp for Great Britain,—propose it, and see how many will endure to hear of it. And if there is no chance for being supported in taking Antwerp, what chance is there for being supported in taking away the use of Antwerp? Suppose the French should intimate, they wish very much to take away the use of Chatham;—they see certain proprieties too, in closing or at all events checking by duties, the navigation of the Thames. Why should any man yield to such a demand? And why *will* any man yield to such a demand? The closing of the Scheldt is in truth one of those antiquated horrors, like the Slave Trade, which gone-by politicians have been

in the habit of supporting as the life's blood of their country, but which the modern race of English are heartily ashamed of, and would be much sooner induced to make a crusade against, than to disburse a shilling to support. Modern England happily is not in the condition, which makes her existence identical with the power of setting Europe at defiance. She can afford to see other nations in possession of the natural force which God has given them, as well as an honest man to see his neighbours with unshackled limbs. The days of England's tyranny weighed heaviest on her own people. It was the English that were truly vanquished, like the serfs of the feudal lord. Just such advantage as the well-disposed inhabitants of a walled town had by the power of the feudal robber that domineered within their borders,—had the people of England by what the Tories called the "domination of the seas." Give us our own sea, and Reform within it; and let all other people make the best of theirs. The nations of Europe have no natural enemy, but "the monarchical principle." To drive back the barbarian diplomacy into its frightful deserts, and extirpate the domestic parties who enlist under its banners, is the *grande pensée*, the single object that civilized men will fight for now. The great fraud of commercial rivalry, which taught the masses that they were mutual enemies, is everywhere coming down. People can no more be set against people, for the advantage of the common foe. Europe is one society, with one enemy. There has been much treason, much weakness, and much folly; *mais encore, vogue la galère.* A time is coming that will pay for all; so far as wasted blood, betrayed hopes, and all the ruin that springs from cowardice and treachery, are capable of repair. In the mean time, depend on the English people. They know that all they have got, can only be preserved by going on under their present leaders, if they will march; if not, under those that will.

PROGRAMME to the WESTMINSTER REVIEW for 1 April, 1833.

THE ministers seem determined to have their steeple-chase in Ireland, *coute qui coute.* It is true they have been cut down from a canter to a hobbling trot. But there may be enough left yet, to end in what they have not counted on. *Fiat voluntas Dei;* they would, and nobody could hinder them.

In the mean time all English Reform is halted, till the Irish go gently under the harness of courts-martial. After which, there is nothing but the fear of popular resistance, to hinder anybody that pleases from doing the same in England. Truly John Bull was a simpleton, to see his brother put into the ministerial bilboes so quietly.

Nothing goes forward but the Factory Bill;—a fraud got up to distract attention from Slavery abroad, and lay up a store of charges against the moral character of the manufacturing population, to be drawn upon whenever the question of the Corn Laws shall come on, in proof of the unadviseableness of permitting the extension of manufacturing industry.

The French royalists are in a sad dilemma. They are like to have a *Duc de Piquette.* Will civilized men never find out how barbarous it is, to have the good or ill of nations depending on the philoprogenitiveness of their idols?

WESTMINSTER REVIEW, 1 April, 1833.

ART. I.—1. *Pledges defended and offered in a Letter to the Electors of Lambeth, by Daniel Wakefield, Esq.*—Printed by Truscott, 37, Blackfriars Road. 8vo. pp. 12.

2. *Cobbett's Weekly Political Register.* Sept. 8. 1832.

WHERE is the man so ignorant as not to have heard of an "equitable adjustment," or so base as to object to it? The sound itself is irresistible; and it is clear upon the face of things, that we must have an "equitable adjustment."

What *is* an equitable adjustment however, is of that perplexed part of the business of law-giving, which it is not so easy to settle by acclamation. For it is not to be supposed that anybody is so silly, as to expect that he is to carry a vote for an equitable adjustment, and have the how, the what, and the where, left blank for himself to fill up, at discretion.

The roots of this question lie as far back as the Revolution of 1688. Soon after that event, money began to be borrowed for the public service,—or if the expression be preferred, for supporting and defending the revolution which had just been made,—and the produce of the taxes pledged for the interest. There is no use in tracing the progress of the system; like all mischiefs, it "progressed" fast. The objects for which the money was borrowed and expended, were good or evil acording to the politics of the day; and there would be no wrong in stating, that according to the judgment of the parties now happily uppermost in the country, the major part of the objects,—the whole perhaps except the earliest,—were abominably bad. This however is not the immediate concern of us of the present generation;—we may have some power of affecting the good or evil conduct of the government for the coming century, but we can have none of altering the past. The government, in the exercise of the legal power which it had,—though undeniably against the best efforts of a minority who thought its con-

duct wrong and tried to hinder it,—spent and threw away the people's money for purposes worse than useless, and multiplied twenty-fold the power of doing this, by the invention of borrowing on the credit of the interest. The principal furnished, might to a certain extent come in the first instance from individuals eager to promote the objects for which the borrowing took place; but the majority were moved by no other feeling than that which induces a shopkeeper to sell his wares without inquiry into the use that is to be made of them; and the greater part of the value was rapidly transferred under the shadow of the existing laws, to holders perfectly free from political bias, and actuated solely by the prospect of making a favourable investment for the produce of their industry, or a provision for their families.

But this was not all. The question became complicated in another way, through the dishonesty and baseness of the political party which had bestrid the shoulders of the nation like the Old Man of the Sea, and has only just been shaken from its seat. It occurred to the Conservatives, (for they were conserving *then*), that after having mortgaged the taxes, it was easy to cheat the mortgagees. And the way they set about it, was by an issue of fictitious paper. In this way they brought down the value of the pound sterling to fifteen shillings; whereby they, first, pocketed what was got for the extra pieces of paper, and secondly, paid the old mortgagees only fifteen shillings in the pound; while to preserve the value of the taxes, required no greater craft than laying the duties *ad valorem*. If the mortgagees or those to whom they had transferred, had been conspirators in the public wrong, this might only have been the devil cheating his own. But they were not; they were no otherwise implicated, —and there was no further justice in plundering or allowing them to be plundered,—than there would be, in the event (from which the heavens protect us) of the Conservatives coming back to rule and power, in demanding from every tradesman to surrender the price of all he might have been guilty of selling to a reformed government.

Things went on in this way, with decreasing prospects of alteration for the better. Men began to bet there never would be any alteration; and one hasty speculator chose to hoist a gridiron and declare he would be fried upon it if ever the paper was paid in gold. The paper is paid, and the collop remains uncooked; and all that can be said in excuse is "Who would have thought it?" There was manifestly one way in which the government might pay in gold; which was, by paying at other people's expense. And this it was, the speculator of the gridiron should have thought of, before he proclaimed that he had

hedged his cuckoo. If the mode of laying the taxes could be changed from imposts *ad valorem* to imposts fixed in nominal amount, it only required the command of a little superfluous revenue to begin with, to ensure the arrival of a time, when the having to pay the fundholders in a currency of increased value, would be overbalanced by what would be gained upon the residue of the taxes, and so the gradual buying-up of the superfluous paper become a gainful operation *.

Whether the government that paid in gold, knew all the bearings of what it was doing, may possibly be matter of dispute; but it manifestly knew more than the speculator of the gridiron. It was on one hand putting an end to the continuance and progress of an existing wrong, and on the other it was causing new losses which might themselves be reasonably represented as coming under the same category. By the cold-blooded swindling of the Conservative government, the mortgagees, consisting ultimately for the most part of the industrious classes or their representatives, were cheated of a portion of their interest; and an injury of the same nature was inflicted on all who from other sources were the owners of ancient contracts. No way appeared open for the relief of these classes, but retracing the steps which the swindlers had taken. And even this, made no pretence of direct compensation for losses sustained; it only put an end to their further accumulation. It did not attempt to say, "The shillings of which you were swindled by the Conservatives yesterday and the day before that, shall be given back to you;" but only "Something shall be done to prevent the taking another shilling from you to-morrow." To those however who had lent their money at intermediate periods during the progress of the depreciation, a prospect was held out, not only of cessation of plunder, but of compensation, which might either be partial, complete, or excessive, according to the dates at which their loans were made. Where the compensation on a particular loan was excessive, there was no certainty that this fell into the hands of one of the individuals who were also sufferers by the loans where the compensation was still defective; but it went to make a sort of compensation in the gross. A class was injured, and the same class was benefited; it was like showering first grape-shot and then bread-loaves on the same battalion, where though the distributions in both kinds may not light always on the same heads, there is no doubt that the masses that have undergone the baptism of the first, are the better for the second.

* See the Article on the *Instrument of Exchange*, p. 320 of Vol. III. of the present Work.

So far, however, the good done was undeniable; unless the plea should be at any time set up, that the suffering classes received in the gross *more* than the amount of their previous losses. But to this good there were two *sets off* in other quarters; which were, first, that this more or less perfect compensation to the mortgagees was made through a measure very expensive to the community at large, to wit the buying up the fraudulent paper of the Conservatives; and secondly, that at the same time that a set of old public and private creditors were righted, a more modern set of private debtors were injured and brought to loss. Both of these should evidently have their fair share in the account; and only the fair one. The way therefore must be, to try to get at the balance of good or evil. With respect to the first, or the expense to the community, the fourth part of a currency which in substantial value might be estimated at forty-five millions but was nominally sixty, was to be bought up; which if done gradually, as it must be, would cost about thirteen sound millions, or the value of an annuity of some 650,000*l.* The fraud upon the fundholders (to keep back for the present the effects on other creditors) would, if they had been all old fundholders, amount annually to one fourth of about forty millions (being the interest of the debt), or ten millions; from which if three-fifths are struck off as an allowance for those who were not of the oldest class, there will remain an annuity of some four millions, or about six times the annuity which expresses the expense to the community of buying up. The community therefore laid out one pound, to do a right of six; which can hardly be called a bad bargain. Not that it made a direct gain thereby in a pecuniary view; because the one pound was expended merely to prevent the six pounds from being taken from the right man and given to the wrong. But exactly the same may be urged against all the expenses of government for purposes of internal regulation; the whole or principal object of which, is simply to prevent this going of money to the wrong man. The second count, or the sufferings of the private debtors which arose during the return to justice, will be much more than balanced, if they are set off against the justice done to the old creditors of the same class. For it is manifest that their amount must be much less, if it was only from the circumstance of men having had warning of the variable value of outstanding debts and credits, and consequently being put upon their mettle to reduce the magnitude of the sums so left to hazard. There can therefore be no doubt, that six to one, may be taken as the proportion of the whole good done, to the cost of doing it. And this cost whatever it may be, can only be fairly put to the charge of the authors of

the wrong; in the same manner as the parties who should cut a sea-bank and inundate a county, would be justly chargeable with all the trouble and expense incurred to remedy the mischief.

In this state of things the question seems to reduce itself definitively, to whether any class of men have made an unfair charge for losses, or been overpaid; for to propose to go back to the old state of things because there have been losses and expenses in removing from it, would appear to be the same kind of roguery or folly as to say in the case of damming out an inundation, "The expense of this has been enormous. The whole country-side has sent its carts and horses, and done statute-work past reckoning, to put this dam together. Wherefore we of the parish of Little-Wit, move and propose,—*that the dam be carried away again.*" There is no exaggeration in this illustration of the proposal, that because a grievous evil has been remedied at a grievous cost, a third grievous evil shall be incurred for the sake of getting back to the first.

The Tables of the late Mr. Mushet* may be supposed to be familiar to every person who pretends to have voice or opinion on the present subject. They, however, stopped short, and at rather an interesting point; which was at the question, of what would be the result of calculating the gains and losses of the fundholders at *compound*, in place of *simple* interest. This deficiency has been supplied by the exertions of a well-known friend of political improvement, John Childs, Esq. of Bungay, Suffolk; the results of which are here next given, and will be most readily understood by supposing each column of Loss or Gain to be inserted after Mr. Mushet's column headed "Annual Loss &c." or "Annual Gain &c." in the Tables whose numbers are expressed.

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* A series of Tables, exhibiting the Gain and Loss to the Fundholder, arising from the Fluctuations in the value of the Currency. From 1900 to 1821. By Robert Mushet, Esq.—London. Baldwin and Co. 1821.

Amounts of the respective sums *lost* or *gained* by the Fundholders on each year from 1800 to 1821, through receiving their interest in a money *less* or *more* valuable than that in which the principal was lent; calculated to 1821 at compound interest 5 per cent, interest made principal half-yearly.

	TABLE 1.		TABLE 2.		TABLE 3.		TABLE 4.	
YEAR	*Loss.*	*Gain.*	*Loss.*	*Gain.*	*Loss.*	*Gain.*	*Loss.*	*Gain.*
	£.	£.	£.	£.	£.	£.	£.	£.
1801	5,304,837	..	75,566	..	..	..	..	..
2	4,391,717	..	62,559	..	..	32,892	..	..
3	1,523,944	..	21,708	..	..	164,172	..	304,162
4	1,450,512	..	20,662	..	..	156,261	..	289,506
5	1,380,618	..	19,666	..	..	148,732	..	275,555
6	1,314,093	..	18,719	..	..	141,565	..	262,278
7	1,250,772	..	17,817	..	..	134,743	..	249,640
8	1,190,503	..	16,958	..	..	128,251	..	237,611
9	1,133,138	..	16,141	..	..	122,071	..	226,161
1810	5,467,067	..	77,875	..	103,346	..	287,279	..
11	3,028,212	..	43,137	..	..	10,464	24,322	..
12	7,622,310	..	108,576	..	227,166	..	565,942	..
13	8,011,575	..	114,120	..	254,066	..	625,306	..
14	8,366,441	..	119,176	..	278,887	..	680,019	..
15	5,296,980	..	75,452	..	132,065	..	341,925	..
16	5,041,742	..	71,817	..	125,702	..	325,449	..
17	763,310	..	10,873	..	..	82,230	..	152,348
18	726,529	..	10,349	..	..	78,268	..	145,007
19	1,157,594	..	16,490	..	..	51,186	..	84,650
1820	643,757	..	9,171	..	..	71,634	..	133,024
21	..	..	..	..	..	101,306	..	201,698
	65,065,651	..	926,831	..	1,121,232	1,423,775	2,850,242	2,561,640

Amounts of the respective sums *lost* or *gained* by the Fundholders on each year from 1800 to 1821, through receiving their interest in a money *less* or *more* valuable than that in which the principal was lent; calculated to 1821 at compound interest 5 per cent, interest made principal half-yearly.

	TABLE 5.		TABLE 6.		TABLE 7.		TABLE 8.	
YEAR.	*Loss.*	*Gain.*	*Loss.*	*Gain.*	*Loss.*	*Gain.*	*Loss.*	*Gain.*
	£.	£.	£.	£.	£.	£.	£.	£.
1801	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..
1810	227,084	..	59,621	..	157,684	..	267,651	..
11	103,575	..	27,194	..	71,922	..	122,079	..
12	343,855	..	90,281	..	238,769	..	405,282	..
13	366,432	..	96,208	..	254,447	..	431,895	..
14	387,114	..	101,638	..	268,807	..	456,270	..
15	230,494	..	60,517	..	160,053	..	271,670	..
16	219,387	..	57,601	..	152,340	..	258,580	..
17	..	..	..	..	..	..	..	..
18	..	..	..	..	..	..	..	..
19	24,117	..	6,333	..	16,747	..	28,425	..
1820	..	747	..	195	..	519	..	880
21	..	33,227	..	8,724	..	25,123	..	39,163
	1,902,058	33,974	499,393	8,919	1,320,768	25,642	2,241,852	40,043

Amounts of the respective sums *lost* or *gained* by the Fundholders on each year from 1800 to 1821, through receiving their interest in a money *less* or *more* valuable than that in which the principal was lent; calculated to 1821 at compound interest 5 per cent, interest made principal half-yearly.

	TABLE 9.		TABLE 10.		TABLE 11.		TABLE 12.	
YEAR	*Loss.*	*Gain.*	*Loss.*	*Gain.*	*Loss.*	*Gain.*	*Loss.*	*Gain.*
	£.	£.	£.	£.	£.	£.	£.	£.
1801	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..
1810	174,232	..	87,232	..	8,353	..	..	..
11	79,468	..	39,787	..	3,810	..	..	51,105
12	263,824	..	132,088	..	12,647	..	62,712	..
13	281,148	..	140,761	..	13,476	..	77,463	..
14	297,016	..	148,706	..	14,237	..	91,137	..
15	176,847	..	88,541	..	8,478	..	24,107	..
16	168,326	..	84,274	..	8,070	..	23,946	..
17	..	..	..	..	..	..	..	73,023
18	..	..	..	..	..	..	..	69,504
19	18,504	..	9,264	..	887	..	..	55,153
1820	..	573	..	287	..	27	..	63,256
21	..	25,494	..	12,763	..	1,222	..	76,478
	1,459,365	26,067	730,653	13,050	69,958	1,249	278,365	383,519

Amounts of the respective sums *lost* or *gained* by the Fundholders on each year from 1800 to 1821, through receiving their interest in a money *less* or *more* valuable than that in which the principal was lent; calculated to 1821 at compound interest 5 per cent, interest made principal half-yearly.

	TABLE 13.		TABLE 14.		TABLE 15.		TABLE 16.	
YEAR	*Loss.*	*Gain.*	*Loss.*	*Gain.*	*Loss.*	*Gain.*	*Loss.*	*Gain.*
	£.	£.	£.	£.	£.	£.	£.	£.
1801	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..
1810	..	..	..	..	..	..	..	..
11	..	..	..	..	..	..	..	..
12	109,148	..	..	..	..	..	..	..
13	121,309	..	18,635	..	..	..	..	..
14	132,524	..	35,987	..	50,624	..	..	..
15	64,743	..	..	31,422	..	133,993	..	582,970
16	61,623	..	..	29,908	..	127,536	..	554,880
17	..	34,261	..	127,865	..	397,118	..	1,410,476
18	..	32,611	..	121,704	..	377,982	..	1,342,511
19	..	20,316	..	104,360	..	327,924	..	1,175,917
1820	..	29,884	..	110,614	..	343,420	..	1,219,407
21	..	43,618	..	123,385	..	377,956	..	1,326,984
	489,347	160,690	54,622	649,258	50,624	2,085,929	..	7,613,145

Amounts of the respective sums *lost* or *gained* by the Fundholders on each year from 1800 to 1821, through receiving their interest in a money *less* or *more* valuable than that in which the principal was lent; calculated to 1821 at compound interest 5 per cent, interest made principal half-yearly.

	TABLE 17.		TABLE 18.		TABLE 19.		TABLE 20.	
YEAR	*Loss.*	*Gain.*	*Loss.*	*Gain.*	*Loss.*	*Gain.*	*Loss.*	*Gain.*
	£.	£.	£.	£.	£.	£.	£.	£.
1801	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..
1810	..	..	..	..	..	..	..	..
11	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	..
13	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	..
15	..	..	..	..	..	..	..	..
16	..	..	..	..	..	..	..	..
17	..	105,421	..	660,670	..	..	..	..
18	..	100,341	..	628,836	..	..	..	..
19	..	83,331	..	522,287	..	..	..	..
1820	..	91,281	..	572,059	..	15,384	..	..
21	..	105,463	..	660,928	..	36,103	..	4,259
	..	485,837	..	3,044,780	..	51,487	..	4,259

ABSTRACT of the preceding.		ABSTRACT of the same kind of calculations made at 3 per cent throughout instead of 5. (*The previous calculations omitted to save room.*)	
Loss.	*Gain.*	*Loss.*	*Gain.*
£.	£.	£.	£.
65,065,651	..	32,018,078	..
926,831	..	455,676	..
1,121,232	1,423,775	579,232	684,364
2,850,242	2,561,640	1,471,362	1,235,803
1,902,058	33,974	980,447	20,180
499,393	8,919	257,418	5,298
1,320,769	25,642	680,809	15,230
2,241,852	40,043	1,155,600	23,786
1,459,365	26,067	752,257	15,482
730,653	13,050	376,624	7,751
69,958	1,249	36,055	741
278,365	338,519	144,276	219,499
489,347	160,690	254,481	92,669
54,622	649,258	28,379	371,413
50,624	2,085,929	26,478	1,190,774
..	7,613,145	..	4,339,005
..	485,837	..	279,684
..	3,044,780	..	1,752,824
..	51,487	..	30,501
..	4,259	..	2,530
79,060,961	18,618,263	39,217,172	10,287,534

GENERAL ABSTRACT.

	At 5 per Cent.	At 3 per Cent.
	£.	£.
Losses upon the Amount of funded Debt 1st Feb. 1800, and upon the Debt contracted above that redeemed, 1800 to 1821; with compound interest to 1821	79,060,961	39,217,172
Gains upon the Debt contracted above that redeemed, 1800 to 1821; with compound interest to 1821	18,618,263	10,287,534
Balance of *Loss*	60,442,698	28,929,638
Interest or Yearly Value of the above Balance is	*Loss* 3,022,135	*Loss* 867,839
The Total amount of Debt contracted above that redeemed from 1800 to 1821 (See Table No. 1. of Muslet) was 4,128,191£., at an average of 87£. 6s. 5d. per cent. The interest paid for this to the fundholders in gold and substantial money, is consequently too much (as being paid in a better currency than that in which it was lent), by a quantity bearing to the whole interest the proportion of 12£. 12s. 7d. to 100£.; which must be set down to the Fundholders as an annual	*Gain* 2,600,042	*Gain* 1,560,025
Annual permanent result to the Fundholders	*Loss* 422,093	*Gain* 692,136

* *Mr. Muslet is supposed to have made a mistake in this part of the calculations.* See Postscript.

Here is the result of the calculation of compound interest at 5 per cent. But as there is no reason for acceding to the dictum of that member of a game-preserving parliament, who said, that "everybody knew five per cent to be the natural interest of money,"—it is desirable to know the consequence of employing a different rate. And this also has been provided by the same indefatigable calculator; columns being found added to the "Abstract" and "General Abstract" in the preceding page, containing the results of employing 3 instead of 5 per cent throughout, the previous calculations being suppressed to save room. The inference from these is, that if 5 per cent is too high a rate, the fundholders may not have lost. Now the fact is well known to have been, that the country-gentlemen who were the "lawgivers" in the unreformed time, were anxiously struggling to prevent the very men in question from being allowed to take *more* than 5 per cent interest; which is proof that above 5 per cent might have been had, and therefore 5 per cent is not too much.

As far then as arithmetic goes, the whole charge and plea of the fundholders having had more than they ought, is a thing for knaves to recruit for fools with. But a fresh ground set up is, that the prices of goods have declined, *from causes distinct from the depreciation of money by excess;* and therefore compacts should not be kept. For if this is not meant, it is no fresh ground, and the answer has been given already. Suppose, then, a man has made a bet, which has ended in his being called on to pay a hundred pounds on a certain day. And suppose he should say to his creditor, "You won of me a hundred pounds. But mutton has fallen, and therefore I hope you will take less. If it had risen, you may depend on it you would never have heard of me; but as it is, I intend you shall take less." This is the same kind of reasoning as if the insured, on seeing his ship come safe to port, should refuse to pay the insurer, on the ground that there had been no loss;—knowing full well, that if things had turned out the other way, the insurer must have paid. If mutton had risen, not a word would anybody have said of the necessity of purchasing the same quantity of loins and chops for the fundholder; but because it has fallen, out crawls a generation of fraudulent debtors, and proposes it as a reason for breaking compact.

But there is another defect in this last scheme or argument, which is still more fatal. Suppose a man *did* lend a leg of mutton or its price, when mutton was scarce and dear; does it follow that he is paid by issuing to him a leg of mutton or its price, when mutton is plentiful and cheap? To put a case, suppose a man in a town besieged, lent a crown when mutton

was at a crown a pound and other things in proportion; is he paid, by saying to him when things are cheaper, "There, Sir, is sixpence; *it will buy you a pound of mutton*"? All mankind would revolt at such a proposition, except the equitable-adjustment people; and the wrong is in representing the pound of mutton at one time as of the same value with a pound at the other,—the fact being that it is of very different value, the proof of which is, that it fetches different prices,—or if preferred, that to procure it, required parting with the result of one hour's labour in one case, and ten in the other. It is to be hoped they will persevere; that they may see what an overthrow they will obtain from the indignation of their countrymen.

But it would be too hard to charge the whole to malevolence or dishonesty. A lack of comprehension is at the bottom of at least half. The point which is too much for the understanding of the projectors, is that the community would not gain the amount though the debt were sponged-off tomorrow. They are unable to receive the doctrine, that if every man held a share of the debt proportioned to the taxes he pays towards it, sponging the debt would only be filling his right pocket at the expense of his left; and that consequently, all gain which could be made by any person in the actually existing state of things, must be by the equal loss of somebody else, which in the aggregate can make no national gain. And here arises the nice point, the delicate point, the point which will serve the Joseph Surfaces of either House for an age of trickery when the time comes,—which is the distinguishing between the consequences of borrowing and throwing away a million, and the consequences of ceasing to pay the interest. The moment it is asserted that nothing can be gained by ceasing to pay the interest, up will stand a spruce gentleman and declare, that if that be true, there would be no harm in borrowing and spending eight hundred millions more. It is a hopeless case; unless a reformed parliament should have brought the remedy. In the old state of things, it would have been as hopeful to try to teach a fox-hunter Euclid, as to expect to weed out such an imagination from the House of Commons. And this it is, rather than malevolence, which is at the bottom of the outcry for robbing the fundholders. Men cannot comprehend, if the contracting of debt be an evil, how it should not be a special source of national wealth to stop paying the interest afterwards. Their mental plenishing is all too feeble to discern, that the fact of the interest being owing from one man to another, is perfectly good reason why nothing can be gained in the aggregate by ceasing to pay; though it is the most babyish of all fallacies when

applied, as the well-booted Tory bankers were fond of applying it, to prove that there was no harm in borrowing million after million and throwing away. Another form under which the same confusion shows itself, is in the persuasion of some overpowering good that would be the result of what is popularly called paying the national debt. There is a perplexity of ideas, between paying the debt ourselves, and getting the man in the moon to pay it for us. If the latter personage has the means and could be persuaded to perform us this good office, the benefit to us would be clear. But if we are to do it ourselves, where is the mighty advantage of getting rid of an annuity, by laying down the present value at the market price? If it was advantageous for men to do it, the thing might, and probably would, be put in a course of doing tomorrow. It is not to be denied that there are some gains that might be made; for example, the machinery for collecting taxes and paying fundholders might be spared. But it is clear the speculators on paying the national debt, have something more magnificent in view than this. They devoutly believe, that paying off the debt, would be gaining the amount. In those far distant times when the governments of European countries shall have undergone changes it would now freeze men's blood to think upon, a question may arise of whether it would be advantageous to try to pay off a public debt by an advance of the principal. But till then, under permission, we are well as we are; and considerably better than we should be, if any government within the imaginings of living men, had the power of urging the seductive fallacy, that we were a nation without a debt, and therefore admirably situated for the incurring of a new one.

As an earnest of the result which is likely to ensue from pressing the project of defrauding the public creditor, it is interesting to view the way in which the plan is spoken of by men seeking an entrance into the reformed parliament by direct appeal to popular support. Take for example the following extract from the pledges offered by the candidate on the popular interest for Lambeth.

'2. I promise to oppose any scheme for robbing the public creditor. The debt, it is true, was incurred by the boroughmongers; but the people encouraged them to create it, approving of the war with revolutionary France, shouting for victories obtained with borrowed money, and all but persecuting the few who recommended peace and economy. They were then parties to the contract and would be bound to pay the debt, even though all the creditors were boroughmongers, or bishops. But who are the national creditors? The people themselves; widows and orphans whose property has been invested in government stock; depositors in savings-banks; and others who have

laid out the whole of their small property in public securities. The greater part of the debt has been purchased by persons, each of whom receives an interest for his money less than 200*l.* a-year, or about 4*l.* per week. And now, mark my words, (without setting up for a prophet I want your attention) there will be plans for robbing those who have bought the debt; and such plans will find favour with many of the Whig and Tory aristocracy as soon as ever their hands shall be taken out of the public purse. They who spent the capital will be for evading payment of the interest as soon as ever they shall be left to their private resources. I am all for taking their hands out of the public purse, and therefore long for the time when they shall countenance projects for robbing the savings-banks; but I will oppose such projects, come from whom they may; and if you hanker after anything of the kind I am unfit to be your member. This is test the first.'

'3. The source from which funds are to be derived for paying the interest of the debt is quite another question. The debt is a double, a tenfold, burthen through the awkward manner in which we bear it. Those whom the people encouraged to contract the debt have thrown the burthen of it on the people, have made the burthen as great as possible by taxing industry for its support. Who that had a weight to carry would tie it to his legs? A tax on the poor is a cruelty as well as a tax, being paid with deprivations and sorrow; whereas the rich may remain rich after paying taxes, each in proportion to his means, and without any diminution of happiness. Our taxes seem to have been framed with a view to inflict pain as well as to raise money. Most of them, besides, are a hindrance to the production of wealth, restricting the whole produce of industry instead of only distributing some of it in a particular way. Considering the industry and skilfulness of Englishmen, and the rapid progress that we are capable of making in the arts of production, I believe that, if all taxes which check production were repealed, the national wealth might become so much greater, that a tax on property, sufficient to pay the interest of the debt, would not be felt as a burthen. For these reasons I look to a complete reform of our system of taxation as one of the best consequences of the reform act. Conservatives, both Whig and Tory, will probably oppose such a reform, not so much through selfishness as from ignorance; wherefore I promise to oppose them in this matter if you should elect me.'—*Pledges &c. p.* 6.

The "*scheme*" of the author of the Political Register is of a very different bearing; as may be seen from the copy following.

'1. Not by any means to depart in any degree whatsoever from the present money standard of the country.'

'2. To take all the public property; namely, the crown-lands, the crown-estates, the woods and forests, the Duchies of Cornwall and of Lancaster, the *real* property now possessed by the bishops, deans and chapters; and to enforce the rigid payment and collection of all arrears due to the public from *defaulters*; and, in case

of their being dead, pursue their heirs and assigns rigidly, according to the letter of the well-known and most admirable "*Statute of Public Accountants*," passed in the reign of QUEEN ELIZABETH, and still unrepealed; and to make the receivers of all unmerited pensions, sinecures, and grants, "*public accountants*," and pursue them and their heirs and assigns accordingly.'

'3. To take the whole of what is called the national debt; and in the first place, reduce it one half in amount, we having, for many years been paying twice as much interest as is due to the fundholders, even supposing it to be a debt that we are bound to pay at all.'

'4. Then cease to pay interest upon a quarter part of this half at the end of six months, and so on, in order that interest might cease to be paid upon any part of it at the end of two years.'

'5. Then appoint a board of five commissioners to receive and examine the claims of suffering fundholders, and leave it to that board to make such compensation as might be found consistent with justice to the nation and humanity to the parties, out of the proceeds of the property mentioned before.'

'6. To disband the standing army, abolish all *internal* taxes whatsoever, raise a revenue of from six to seven millions a year in custom-house duties, making this Government as cheap as that of America, and never suffering an Englishman again to see the odious face of a tax-gatherer with an ink bottle at his button-hole, leaving for the people to keep for their own use the fifty-four millions a year, now pocketed by the tax-collectors in part, while the rest is sent up to London.'

'7. To make an *equitable adjustment* of all *contracts* and *debts*.'

'This, gentlemen, is *my scheme*; this is my way of putting money into the pockets of the people, or rather of preventing it from being taken out of their pockets.'—*Weekly Political Register*. Sept. 8. 1832.

It is impossible not to estimate the spirit and perseverance with which the author of the Political Register has opposed the paper-money fraud; and his own "scheme" has all the superiority, which open freebooting has over circuitous larceny. The defects in it, are that the allegation of the fundholders having been paid twice as much interest as was due, is not only without evidence, but in the teeth of evidence; and that the appointment of a board of commissioners &c. may be dispensed with, by the readier process of the country's paying its debts without. The scheme for adjusting contracts and debts by the price of mutton, has also been shown to be naught. If it is chosen to take the public property, crown lands and the Duchies of Cornwall and Lancaster &c. and apply them to buying up the debt that is in the market, and so relieving the tax-payers of the interest; this is quite another thing, and what it is conceived neither gods nor men could be found to object to. In all events, let the people hold together; and pluck the robbers, but not

pluck one another. The great safety of the fundholders is in reform ; a fundholder that is not a reformer, is a fool it would be charity to relieve of his money. Get liberty of trade, and then the patrons of " equitable adjustment " will be obliged to pay their own debts and allow the payment of other people's. The pressure of public misery, arising from the prohibition of commerce by Act of Parliament, makes the only fulcrum on which they have a chance to set a foot.

POSTSCRIPT TO THE ARTICLE ON EQUITABLE ADJUSTMENT.

A provincial paper has started two objections to the contents of this Article ; which will be taken in succession.

' If then this calculation be correct, the fundholders and not the public have been wronged by the alterations in the value of money. But are not the whole of the calculations of Mr. Mushet and Mr. Childs vitiated by the assumption that the difference between the mint and the market price of gold measured the depreciation of paper money ? Was not the price of gold itself lowered by none being required for the circulating currency ?'

.....

' We should be glad if he [Mr. Childs] would favour us with his opinion on this question, and to learn from him what difference an addition of 5 or 7½ per cent to Mushet's estimate of the extent of depreciation of paper would make in the result of his calculation.'—*Manchester Times.* 16 March, 1833.

The question then is, whether, supposing such a fact to have existed, its operations would be *against* the general results stated by Messrs. Mushet and Childs, or in favour of them. Assume then that the calculators have not rated the depreciation high enough, and that it ought to have been rated, for instance, at one-twentieth more than was done, throughout. The first effect will be, to increase each of the losses of the old or original fundholders by one-twentieth ; and of consequence the amount of each and all of these losses at compound interest to 1821, will be increased in the same proportion. In the same manner the several gains and losses arising from the difference between the depreciations at the two moments of lending and receiving the interest, must be increased by one-twentieth ; for if each of these two depreciations is to be increased by a twentieth, their difference, which is the element of gain or loss, will be increased in the same ratio ; and the amounts at compound interest to 1821, and the balance of these amounts, and the yearly value of that balance, will be increased in the same also. So also the *Gain* to the fundholders arising out of the debt contracted above that redeemed from 1800 to 1821 having been

contracted in an inferior currency, must be increased by the same addition of one-twentieth; for it was contracted in a currency whose depreciation was greater by a twentieth than was reckoned for. The final consequence therefore is, to *increase* the "Annual permanent result to the Fundholders," as given in the "General Abstract" in p. 384 for any particular rate of interest, by one-twentieth;—that is to say, to make the annual *Loss* greater in the case where interest was reckoned at 5 per cent, and the annual *Gain* where it was reckoned at 3. And the same if the depreciation had been under-rated in any other proportion.

At the same time there may be great doubt whether there *was* any such thing as a fall in the value of gold from the cause assigned. 410 millions were borrowed and expended between 1800 and 1821, principally in loans and foreign wars; and the question is, whether much of the 40 millions (for that must have been the utmost amount) of gold thrown out of employment in the English currency, could have staid to cheapen bullion at home, or have produced any sensible effect by being thrown, at the average rate of about two millions a-year, upon the market of the universe. If, however, it *was* so,—the consequence would seem to be, to give the fundholders at 5 per cent a claim for an additional yearly sum proportioned to the addition to the estimate of depreciation.

The other objection is to the illustration of paying the lender with a pound of mutton; and may be answered in less space. In fact it has perhaps arisen altogether from the want of sufficient explanation in the original statement; and circumstances hereafter mentioned having induced the cancel of a leaf, advantage has been taken of it to try to supply the defect.

'It would, indeed, be robbery to give less for the man's leg of mutton than he consented to take for it during a famine. But the question comes, whether its price was raised by the scarcity of meat, or the over abundance of money.'—*Manchester Times. Ib.*

That question is settled by the fact, that the *leg of mutton* answer is only intended to apply to the case where the rise of price shall be urged as having arisen from the scarcity of meat. If it is urged as arising from the over abundance of money, then *the other* is the answer; to wit, that the fundholders have after all been underpaid. The answers must not be put to the wrong objections, and then declared not to fit.

Finally, as this Postscript was on the point of being printed, information was received from Mr. Childs, that he imagined he had discovered an error in Mr. Mushet, consisting in employing in the calculation of the *Gain* of the fundholders (in the last item but one in the "General Abstract" in p. 384 preceding), the

proportion of 12*l.* 13*s.* 7*d.* to 87*l.* 6*s.* 5*d.* instead of to 100*l.* There has hardly been time for giving to the point the consideration it demands; but there has appeared sufficient ground to induce the alteration of the results in p. 384. If the debt (to take round numbers) had been contracted in money of which 100 nominal pounds were intrinsically worth only 80*l.*, and the interest (suppose 5 per cent) is now paid in pounds of full substantial value;—five pounds interest are in fact paid for every 80*l.* instead of every 100*l.* And the proper interest for 80*l.* would be 4*l.*; the interest therefore is 1*l.* too much, being $\frac{22}{100}$ of the actual interest paid. Mr. Mushet seems to have reckoned $\frac{20}{80}$. If the alteration is right, it would have given Mr. Mushet a victory instead of something like a failure. It would have shown a loss to the fundholders even upon the calculation of *simple* interest at 5 per cent; and would probably have produced a powerful effect on the public mind. As it is, Mr. Childs's correction is worth six millions to the fundholders; they will therefore probably look into it, and see whether it is maintainable or not. If it is, the final result will be,—that instead of the fundholders having "for many years received twice as much interest as is their due," they are on the whole receiving too little by 422,093*l. per annum;* so that the value of nearly eight millions and a half if interest is still taken to be at 5 per cent, and of above twelve millions if it be supposed to have fallen to $3\frac{1}{2}$, is owing to them, and likely to be*.

WESTMINSTER REVIEW, 1 April, 1833.

ART. VI.—*Free Trade, as it affects the People. Addressed to a Reformed Parliament.* By Henry Booth.—Liverpool; Wales and Baines. Hurst; London. 1833. pp. 40.

TO gather up and put forward whatever can be turned to the support of principles deemed just and right, is the limited service of a Review. And the readiest of all ways is by a running commentary.

'It has been too much the custom to regard the question of Free Trade, as one of abstract principle and speculation; as a branch of the recondite and somewhat formidable science of Political Economy; interesting as a subject for discussion and argument, but proper, at the same time, to be approached with salutary caution, and with especial distrust, in reference to any practical results; as plausible in theory, but in no wise to be depended on, in the application of its principles to the ordinary routine of trade and commerce.'—*p.* 3.

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* After six years' examination, nothing has appeared to shake the accuracy of Mr. Childs's correction. It stands therefore as a discovery for which gratitude is due to him from every person who has 10*l.* a-year in the stocks throughout the country.—*Added in* 1839.

What *is* "abstract principle,"—and "abstract speculation"? It is true enough that it has been the custom to regard, or more correctly, to describe, the question of Free Trade as one of "abstract principle and speculation;" but can the describers tell what they mean by these phrases,—or do they know themselves,—or can they produce a specimen of an "abstract principle" or an "abstract speculation,"—or show the face of a living man who ever acted, or advised anybody else to act, on either?

The truth is, the logicians made a most unfortunate blunder in a name; and upon this blunder, all who have any interest in disguising truth and persuading men to act irrationally, have been living ever since. When the logicians found out or observed, that if two and two made four in Europe they did the same in China;—that if the various northings and southings of a vessel, added together respectively and one taken from the other, gave its whole northing or southing in the Mediterranean, they did the same with equal certainty in the Red Sea, and may be trusted for doing so on the Lake Dibbie whenever the vessels of an African Steam-Navigation Company arrive there;—they by some strange fatality, if not by that direct inspiration of the dæmon which is stated to bring prisoners to the Old Bailey, called such instances,—not *universal*, as was manifestly their proper title,—but *abstract* conclusions. They made the mistake of confounding *everything* with *nothing;* and instead of calling such truths by a name which expressed the fact of their holding good in all possible cases and situations, they gave them a title which was easily construable by a stupid or dishonest man, into there being no necessity for their holding good at all. Fancy now, that some unfortunate supporter of things as they ought not to be, should undergo the misfortune of having his notes for speaking altered by a wag, and afterwards hold forth in the House of Commons or elsewhere in the style that follows.—'I rise, Sir, to protest against the application of *universal* truths. I am a plain practical man, and cannot give into the absurdity of being led by conclusions *which necessarily hold good everywhere.* I decline to submit, Sir, to the "*crazy generalities*" of gentlemen on the other side, who because they think they have established in some individual cases that taking ten per cent from the principal leaves only ninety per cent behind,—insist on applying it to the case where I and my honourable friends are interested. We deny that there is any justice in affirming, that the more we take from other people, the less we leave them for themselves. We assert the contrary, and that our taking away is really and truly the measure of their gain. We bar all reference to *general* principles. We appeal to "*plain fact, physical and arithme-*

tical proof, sober reason, and humble expediency," and we deny that any of these lead in the slightest degree to the conclusion, that because in some other case a man had only ninety per cent left when ten was taken from him, the same is true when *we* are to be the takers.' This would not be a bad representation of the spirit, and the letter too, of some of the exhibitions of the practical men.

'It is obviously the interest of those who enjoy a monopoly, whether partial or complete of certain departments of trade, to excite a prejudice against any change, as theoretical and untried; and the delusion has been the more easily kept up, owing to the partial and desultory manner in which, on some occasions, and the too learned and abstruse method in which, on others, the great practical question has been treated. The principles of Free Trade have been ably expounded in various works of the highest authority; but these are sealed books to the generality of readers. Again, the question, as included in distinct branches of trade, has been powerfully but separately illustrated. The Corn Trade, the Silk Trade, the Sugar Trade, the Timber Trade, the Export of Machinery, the Shipping Interest, the East and West India Interest, &c. &c. all have been discussed. The abstract reasoner is satisfied that the argument is incontrovertible; and the merchants, or parties interested, are no less dissatisfied with the unavoidable conclusion. Each subdivision of the great question has been debated, and each has been considered as involving a point for subtle discussion between the economist and the merchant or manufacturer, engaged in the particular trade under consideration. But all this time, the most important view of the subject has been in a great measure overlooked. THE PEOPLE have been too much forgotten. In the following observations we shall endeavour to treat the question as one of popular interest and high practical importance; as intimately affecting the substantial well-being of the nation.'—*p.* 4.

It only requires to be proved that in each of the several cases of "the Corn Trade, the Silk Trade, the Sugar Trade, the Timber Trade," &c. all that is gained by the monopolist is lost twice over by somebody else; and then there seems little more chance of oversetting the "abstract" reasoner's final conclusion on the subject, than there would be if each of these interests proceeded by the way of taking one shilling from the sufferers for themselves, and a second to be thrown into the sea.

'The following axioms we shall consider as established, and that it would be a waste of time to offer proof of their truth and correctness:'—*p.* 5.

The procedure by axioms is unfortunate. One of the first steps that will be made in the coming age, will be to revolt and utterly cast the gorge at the notion of axioms. If a thing

can be proved, let it; if it cannot, then say nothing about it. There is no such thing as a self-evident proposition; unless perhaps, that "whatever is, is." Whenever a man professes to build on axioms, an even bet may be taken that some of them are wrong.

'1st. If you prevent imports, by prohibitory duties, you prevent exports to the same extent.'—*p.* 5.

This would be better for being accompanied by the proof; which is, that the imports must either be paid for by exports of some kind, or be got for nothing. Another important point is also missing; which is, that in addition to the loss to the export trader that *should* have been, and the loss of the difference of price to the consumer (which two together make a perfect balance to the advantage to the trader in whose favour the prohibition is issued), there is a gratuitous loss of the same magnitude as the consumer's, which falls on those traders with whom the difference of price would have been spent if it had been left with the consumer. Hence "the Corn Trade, the Silk Trade, the Sugar Trade, the Timber Trade, the " &c. are all so many ingenious inventions for creating a national loss to the amount of the difference of price proposed to be put into the pockets of the monopolists.

'2d. A business or manufacture, protected by high duties on importation, will not, on that account, yield more than the ordinary rate of profit,—otherwise every one would engage in it, which is an absurdity. The public, therefore, *suffer* from being constrained to purchase a *protected* article at a high price, while the manufacturer *does not benefit.*'—p. 5.

This is wrong. A business protected by duties, *will* yield an increased rate of profit, till the increased number that apply to it, brings down the rate. And all the time this process is going on, it will be what is technically called *a better business;* and those who are already engaged in it, will have the benefit of this, and moreover all the chances of securing to themselves an *increased share* of the business after profits shall have been reduced to the old rate. In the same manner, to take the contrary case, if a monopoly be opened by the removal of the prohibition, there is no doubt of the trade becoming *a worse trade.* Profits will be reduced in it, till the weakest go out; during which process, all the engaged must lose; and it will depend moreover on the degree in which the existing traders approach to equality of strength, whether the diminished demand does not fall on all and every of the engaged, in the shape of a diminution of business; and if it does not, all that one escapes, must fall in the shape of additional weight

upon some other. In all of which, it is necessary to keep in view, that any of the *gains* or *losses* so arising to the monopolists, is accompanied by a double *loss* or *gain* to the rest of the community. It does not seem to be generally understood, that there are two ways in which a trader may gain, either separately or both at once;—one, the having a greater rate of profits on a given quantity of business, the other, the having a greater quantity of business at a given rate of profits. And the contrary, in the case of loss.

'3d. Food is the basis, the *sine quâ non* of population; that is, of life and all its enjoyments: population being limited only by the limitation of food; for manufacturers, and workmen of all descriptions will increase and multiply, if you will furnish food in return for their labour.'—*p.* 5.

The plenty of food leads to population; and the power of populating, is the measure, the gauge, of public happiness. It so happens that populating is the very first thing men like to expend their competence upon. The public in fact, takes out its happiness in population. It is true that this populating tends directly to reduce its own materials; and so does eating, a pudding. But the eating is the happiness. There are those who counsel, there should be no pudding; because, they say, eating will reduce it. The best of puddings, they are prepared to prove a temporary blessing; whence they infer, that the whole race is naught. This is not an unfair representation, of some arguments afloat on corn.

'4th. In order that a whole community may obtain the greatest possible quantity of the conveniences and comforts of life, it is necessary to allow the merchant to make his purchases wherever he can procure his commodities of the best quality, at the cheapest rate.'—*p.* 5.

This rather surpasses what even Euclid has ever tried to huddle into an axiom. It is true, however; but it is in strictness a corollary from the first proposition, which was, that in every case of monopoly, an amount equal to the difference of price to the consumers, is thrown into the sea. For if this is true, "the greatest possible quantity of the conveniences and comforts of life" is reduced by said amount. In all cases therefore where the monopolists parade the gains to their respective trades from their monopolies,—or point out the losses that would arise from their destruction;—hear them out, and then tell them, that this is the exact amount of the gain that would arise to the whole community by the removal;—*not to the community after deduction of the monopolists*, but to the whole community, themselves and monopoly interests

included. There is a page in one of Blackwood's Magazines, would make a striking figure under a process of this kind.

The author proceeds,—

'Of the innumerable articles of commerce or manufacture which have, at different periods, become the object of mercantile adventure, the *food of man* is beyond measure, the most important. To this object, therefore, we shall direct our chief attention, taking merely a rapid glance at the system of policy pursued with respect to a few other commodities, in the first instance. We shall begin our preliminary investigation with *Timber*, and inquire how far the Legislature, with reference to this article, has complied with the rule above laid down, of allowing the merchant to purchase it wherever he can obtain it of the best quality, and at the cheapest rate. The best timber in the world for building purposes, is that obtained from the Baltic: the worst timber in the world is that obtained from the British settlements in North America. Our merchants are prohibited purchasing the best timber under a penalty of 2*l.* 15*s.* per load; and they are enticed to purchase the worst timber, by the comparative trifling duty of 10*s.* per load. And what is the result? An immense amount of capital during the last quarter of a century has been attracted to the North American timber trade, for the purpose, or with the effect, of compelling the people of this country to use the worst description of timber; while, at the same time, the capital so employed has not yielded a larger profit than if it had been allowed to flow into other channels, and had been the means of procuring the best timber, and at a lower rate. Thus there has been an enormous waste of property: the public suffers grievously, while the merchant does not benefit.'—*p.* 5.

To put the case in its brevity, the man who uses Canadian timber has 2*l.* 5*s.* per load taken from him in the goodness of his timber, to be given to a man who has timber he wants selling in Canada; and besides this, some other English traders lose to the same amount of 2*l.* 5*s.*, which would inevitably have been laid out with them if the money had been left with the right owner. To say that the Canadian also will lay out the money on somebody, is met by the fact that the disappointed traders would equally have laid it out on somebody. The fraud to be kept up is, to evade or conceal the circumstance of there being a pure and unbalanced loss to the amount of 2*l.* 5*s.*, which would not have taken place if the Canadian had not been allowed a legal robbery. And the whole after all, is only a round-about exhibition of the fact, that a greater price is given for bad timber than needs; which, it requires no ghost to tell, is throwing away the difference.

All the other frauds are of precisely the same nature; the *Sugar and Coffee* fraud, the *Train Oil* fraud, the *China* fraud, the *Silk* fraud, the *Woollen* fraud, the *Leather* fraud, the *Cotton*

fraud, the *Iron* fraud. Our commercial policy is a mass of confluent frauds; by which everybody robs everybody, and throws half the booty into the sea. But they all yield in individual importance to the master pustule, which is the *Corn* fraud. By this, a gross sum of twelve millions and a half per annum is thrown away, in order that a certain other sum, amounting probably to five millions, may be taken from the men who work for it, and given to the landlords whose first principle of law, physic, and divinity, is not to work at all. In other words *seventeen millions* a-year are torn from the mouths of the suffering manufacturer and his starving children, in order that *five* millions of it may find their way into the pockets of a dishonest and tyrannical class who have got a law that nobody but a land-owner shall be in parliament. When pressed upon the point, they bully and appeal to their humanity and charity. The charity is easily defined;—they take with a bucket and give with a spoon. They take seventeen millions a-year out of the pockets of the industrious and the poor, and urge in return that they sometimes give a crown to an old woman at Christmas. They can hardly be said to be personally responsible; for they labour under the misfortune, like the slave-owners in the West Indies, of having been brought up under the persuasion that they were the born lords and tyrants of those whom they oppress. But the oppression is not the less for that; nor will be longer endured for it. And not content with this burning wrong, they appear to have been curious in the grievous and the horrible. Could the art of man have gone further, than to invent the idea, that a per-centage should be taken out of the portions of the widow and the orphan of the industrious classes for the service of the state, and *that the robber class should exempt themselves?* View too the insulting pretext on which this is defended. If a per-centage were taken upon the succession to a landed estate, by repetition an amount equal to the price of the estate would come into the hands of the government! *As if a per-centage upon the pittance of the widow and orphan of the industrious man, did not do the same in exactly the same number of repetitions.* Examine too the delusive and totally unstatesman-like nature of the representation altogether. If one per cent (for instance) were taken upon the succession to a landed estate, a hundred repetitions, it is said, would take an amount equal to the value of the estate. The blunder in the mind of the stater of this, most probably was, that in the course of a hundred repetitions the whole estate would be absorbed and gone. But (to say nothing of the fact that if this was true it must be equally true of the inheritance of the industrious man), is there a shadow of reality about

the statement at all? Suppose that of a landed estate the yearly rent be four or five per cent upon the value, and that every twenty or thirty years one pound is taken out of these four or five;—does that absorb the estate?—has it the smallest tendency to do it?—does it take one single step towards such a consummation?—if it went on for millions of years, would it have made the slighest progress towards it, or have done anything but what all taxation must do, take away a portion from the present enjoyment of the payers. Well may men still admire, *Quantâ sapientiâ regitur mundus.*

What the people have to do is clear. To avow their intention of employing the legal and recognized power they possess, not only to procure the abatement of the two nuisances, but, First, to make the best attainable calculation of what has been substantially taken from the community by eighteen years' Corn Laws, and *lay a tax which, calculated to perpetuity, shall be of precisely the same value and amount, upon the rent of land;*—And Secondly, to estimate in the same manner the probable amount of legacy duty of which the land-owners by the gross and mean trick of making themselves their own lawgivers have defrauded the public, and *lay an extra legacy duty which, calculated to perpetuity, shall be of precisely the same value and amount, upon the descent of landed property.* Some persons may think there is something difficult or mysterious about the calculation; they may therefore be usefully informed, that there are individuals called *actuaries*, whose profession it is to make calculations of this kind, and who if the grounds (that is, the different sums paid or withheld, with the dates) be given them, will for a moderate fee give precise answers, upon principles which nobody can gainsay, and which in fact are recognized daily by the courts of law on the declaration of this same class of professional persons. Six years ago, the people might have accepted something very different; but their circumstances are not the same as six years ago,—they had not the Reform Bill. No man ever got anything by giving up his just right where he had power to enforce it. To give up a part to save the rest, is a perfectly different question; but the people have no occasion to give up a tittle here. They have only to understand the thing, and use the means; and, first or last, their enemies must be at their feet. And whenever that happens, they will overturn the most cruel, dishonest, and insulting structure of human wrong, that with the exception of the West-Indian tyranny, has sullied the page of history. The land-owners will call this, setting one part of society against another. Is not the New Police, setting one part of society against another? There is no use in mincing

phrases; the people are trampled on by the rank and gross oppressions of an insolent order, who push their injustice to the cottage of the starving man and the bed-side of the dying, and feed their hounds on the blood and sinews of the industrious population. Two points are their law and their gospel; one, that they will not pay taxes and other people shall; the other, that fortunes shall be made for them at the expense of other people. All this they consider as their birth-right; and they turn like hunted wild beasts upon anybody who talks of taking it from them. The people have the legal and parliamentary means of relieving themselves, if they have union and sense. The question therefore reduces itself, to whether the people have union and sense. A man of forty-Secretary power, (though not always right, yet thoroughly right here), has laid hold of one of these subjects, and has got at least one eye open to the other. If he ever lets go while God gives him life and strength,—if he does not appear year after year and session after session, speaking his printing and printing his speeches, till he carries the Abolition of this agrarian Slavery,—he will deserve to be buried under piles of his departed "Registers," like the Roman virgin under the shields of her countrymen. As the military Instruction-Book says to lieutenants of hussars,—Why does he delay any longer to make himself famous? He has all the game in his hand; and if he leaves the oppressors a fragment of their wrong, he is bound at the least to charge them an eighth for salvage.

The argument for the Corn Laws derived from the alleged fact that the British grower is the manufacturer's best customer, is reducible to the question of whether he is so good a customer that it is for the manufacturer's interest to let him take money out of his till to expend it at his shop. No manufacturer would be deceived by such a plea in a particular case, and no robber in grain would be impudent enough to advance it; but it is marvellous how men are perplexed when the proposal is to rob them in society. And one more word to the manufacturers. If it is true that the interest of the manufacturers and land-owners are so bound together, that it is for the benefit of the manufacturers to allow the land-owners to prevent the exchange of manufactures for foreign corn,—why should it not be equally true that it must be for the benefit of the land-owners to allow the manufacturers to lay a tax on home-grown corn and so increase the quantity that must be bought with their manufactures abroad? If the connexion is so intimate, turn and turn about is only fair. Would it not be clear, that if the manufacturers were benefited by a tax on home-grown corn, the land-owners also must have the benefit

of the improvement in the condition of their best customers? If they say, "But you cut off part of our custom from us;"—so do the land-owners now. Try this; within the next twenty years, there might be somebody found to ask the question in the House of Commons.

There are some mistakes in the book; as for instance, that "the result of tithes is to inflict on the soil an artificial sterility, *to the extent of the tithe.*" It inflicts a degree of artificial sterility, but probably not to the extent of much above a twelfth part of the tithe, and this from what may be called accidental causes; the error arising, from supposing that there can be any difference in the price of a given quantity of corn in the market, whether it be sold for the benefit of the tithe-owner or the grower. It is in fact the obsolete mistake of Mr. Ricardo; which has been driven out of the field, and nearly given up by all supporters, in England, in France, and everywhere. But inaccuracies on insulated points, need not spoil the rest; and therefore great good may be the consequence of the circulation of Mr. Booth's popular treatise on Free Trade.

WESTMINSTER REVIEW, 1 April, 1833.

ART. VII.—*A few Words on the Effects of Abolition and Commutation of Tithes.* Tait's Edinburgh Magazine for March 1833.

SINCE "request" has been made that the Reviewer (meaning, as is apprehended, the writer of the Article on the Bishop of Bath and Wells's pamphlet in the Westminster Review for January 1833, and on the "Improvement of Condition of the Clergy" in the same Review for April 1832), would "examine carefully the probable effect of that measure on our prospects as to the Repeal of the Corn Law;" it is impossible that he should not do his best to accede to the demand.

It has always been stated, that the Commutation of Tithes would throw a certain advantage into the hands of the landlords, or the church, or both, as they could agree to divide it. And there can be no hesitation in closing with the suggestion of the Northern Liberal, that it would be quite fitting and desirable that the government (supposing it to have any honest intention on the subject at all) should take advantage of this to make the commutation of Tithes and the removal of the Corn Laws contemporaneous, rather than give the landlords anything however small with one hand, for the sake of encountering an increased opposition to taking away with the other. But the Whigs will never do this; they will do directly the contrary. They will jump at any method of increasing the dif-

ficulty of anything they take in hand. If the Northern editor can persuade them to be wiser, he will be luckier than there is hope for; but he will be most welcome. When anything was said of the unadviseableness of refusing to abate an evil on pretence of at some time effecting "the removal of a greater," it was nothing of this kind that was surmised to be contemplated; alas for Mother Church, it was the removal of herself.

At the same time in a case of this nature, a great deal turns upon the absolute magnitude of the object in question; and if individuals differ in their estimate of this, they of course differ in their judgment of the importance of the object. Now the absolute value at issue was stated at something like 25,000*l.* a-year; and though there is no need not to do the prudent thing with 25,000*l.* a-year, yet when viewed with relation to the comparative effect to be produced by it in increasing the resistance of the landed interest, it does a little resemble the charity which should be on the watch to prevent a pea from being thrown in at London Bridge, at a time when there was an inundation in China. The writer in the Northern Magazine however appears to think its magnitude greater, in the proportion of 2*s.* 1½*d.* to 4*d.*; and therefore he has a full right to estimate its effects as equivalent to six peas and a fraction. Which of the two estimates is the true one, must be settled by reference to the grounds on which they are respectively supported. On which it seems not superfluous to add, that the estimate at 2*s.* 1½*d.* does not appear to be supported on any grounds at all, or at least on any that are given. No precise reason presents itself, why the scale of soils might not have been one that should produce 4*s.* or 1*s.* And there would be no danger in asserting, that all estimates built upon measuring the price of corn "by the expense of raising it on the lowest soils cultivated," are wrong except by accident. Instead of "every civilized mortal" agreeing in any such principle, a large and increasing number in all countries, who know no reason why they should be convict of incivility, maintain openly that it is *ab initio* a fallacy the mother of fallacies, and utterly untrue in the sense and manner in which it is applied; that it is a præ-posterous and entirely baseless argument, and that there is no instance in nature of such arguments producing truth except by chance. There is no use in trying to destroy such an opinion by hints at what is done by all civilized mortals. Always doubt a man in anything he seems to think indubitable; it is a capital rule. This is always the sore place; no man is taken in by what he doubts of, but always by something he thinks nobody *can* deny.

But there is another reason for deducting from the effect;

which in fact operates proportionably on the whole field of the corn-laws. Suppose the corn trade free, and men rioting on all the corn that could be found from the Vistula to the St. Lawrence, and increasing their numbers at the rate which would be the consequence, whatever it might be. What would be the result to the owners of the lands which would no longer pay for growing corn? Devastation and barrenness, will say the corn-law defenders. Nothing of the kind, will say the men who look a little before their noses; but on the contrary much multiplication of mutton. Man was not made to live on bread alone; and the moment you place him at increased ease on the important article of bread, he will put forth his feelers with augmented zeal in search of the next important article, of something to make it savoury. As corn, for its bulk, happens to be one of the most easily transportable articles by sea, so beasts, of all kinds that chew the cud and divide the hoof, happen to be the least. There will not be the slightest practical danger, of a glut of mutton from Odessa; nor even of veal from Hamburgh entering into any serious competition with the calves of Essex. It would be very weak to try to persuade the owners of the poor lands that they would be no pecuniary losers; for of all things the weakest is to try to persuade a man in his own craft of what is not true. But it would be no mistake to impress upon these owners, that they are not to be allowed to cry out devastation and barrenness, without a discount to the uttermost penny for the produce of their land in mutton.

The probable effect of a Commutation of Tithes on the prospects as to the repeal of the Corn Law, would therefore, it is held, be exceedingly small, and in fact very near to inconsiderable, as far as connected with the danger above discussed. Other questions there are, of much greater importance, and bearing on the same point. For example, it would be highly advantageous, if nothing hindered, that the commutation should be made in a way that would disengage a numerous and influential body, the clergy, from interest, or conceived interest, in the Corn Laws. This would be done by lodging their commutation-money in the funds. The effect of such a proceeding would be, not only to disengage them from an interest in the Corn Laws, but to give them a visible interest the other way. The only objection to it is, as stated in the first of the Articles in the Westminster Review named in the outset, that the other fundholders would not consider the Church a desirable fellow-passenger. But there is a peculiar reason which considerably diminishes the danger from the clergy. No orders of landholders except those who have the right of having their families supported at the public expense, and fellows of colleges who

have no right to have any families at all, have any ultimate interest in the maintenance of the Corn Laws. It is all only increasing their money income by fifty per cent, and the demands upon it for the establishment of their families by a hundred; and this is what is in the way of being proved upon them, first or last, to their completest satisfaction. Now the clergy in general, are very far from being behindhand in one essential to being prepared to receive this verity,—the families. They are moreover for the most part either possessed of some capacity for investigating a somewhat complicated connexion of causes and effects themselves, or in the way of receiving impressions from those that are. The whole case is within their reach with vastly more ease than the First Book of the Principia, and by the exercise of something like the same faculties of quiet separation, comparison, and combination. There is in fact no race of men whom it will be so easy to persuade of the miserable final policy of the Corn Laws, as the mass of the existing English clergy.

To return to technicals,—the intimation that

'The dispute, in respect of the abstract point, is one of mere words; they [one side] name the whole *residuum* of landed money produce, after deducting expenses of cultivation, *rent*, and then say that tithe is paid out of rent,'—*p.* 700.

is of no correctness. The thing asserted was, that the opponents confounded one sense of the word rent with another, and what was true of one they applied to the other. The case in reality was of this kind. *A* comes into the expectation of a segment of a plum cake; the remainder being kept back to pay the expenses of baking, or any other cause. *B* carries off two-thirds of the segment *in transitu*. *A* complains thereof to *C*; who replies, "Simpleton, how can that be; there is not so much as you talk of, left." It may be permitted to wonder what *C* would have said, if the complaint had been that *B* had left none at all. But this is precisely the mistake fallen into many years ago by the author of the Article on Taxation in the Supplement to the Encyclopædia Britannica, in the memorable and never acknowledged instance of the tithe of the acre of carrot-seed*; and as sheep follow sheep, so men are going upon it still. Dr. Chalmers has just pointed it out† as existing (if he is rightly understood) in the last or nearly the last Numbers of both the Edinburgh and Quarterly Review; and

* See Supplement to 4th and 5th Editions, *p.* 630.
† The Supreme Importance of a Right Moral to a Right Economical State of the Community. *p.* 98.

if a later instance is wanted, it may be found (sad to tell) in this self-same Number of the Edinburgh Magazine*. As in the two last instances it was probably a mere oversight, there would be nothing unreasonable in looking for some recognition of the inadvertency. But there will no good come of Political Economy, till men apply to it with the same habits, the same accuracy, and the same *sang froid*, with which our forebears of the last and preceding century investigated the motion of the moon or the theory of the tides. It takes a much greater quantity of what is vulgarly termed *elbow-grease* to make a political economist, than is commonly imagined. The pursuit is in fact a branch of mathematics of a high order; and till it is considered and treated as such, there will be no unanimity. What chance, for instance, would there have been of arriving at the unanimity of truth on the subject of the moon's motion, where the power had not been previously acquired of distinguishing between the results of two or more sets of clashing agencies operating on a common object?

An instance in point is given by the next sentence.

'It is strangely overlooked, that without tithe, a portion of that *residuum* would not have arisen at all, but is occasioned by the higher price which tithe necessitates.'—*p.* 700.

So far from this being overlooked, the greatest pains were taken to impress and elucidate the fact, that tithe raises the price of corn by a certain amount (stated at fourpence a quarter), which produces "a small reaction" to a corresponding amount on rent; so that what is taken from the rent, is the tithe *minus* the effect of this reaction. Now none of the writers in the Philosophical Transactions would have fallen into a similar mis-statement on a question of natural philosophy, through the mere apparition of an effect producing a reaction on its cause; and simply for the reason, that they had accustomed themselves to consider coolly, and compare accurately, and not

* "They [the landlords] have called themselves "The class which pays the Taxes." .... Why, the whole rental of England, Scotland, and Ireland, does not amount to fifty millions."—*State of the Country.* p. 814.

Now this is simply confounding the cake that is taken, with the cake that is left. The landlords never said that they paid all the taxes out of the rental that was left them; for to make that credible or reasonable, they must show that nobody else paid any money taxes. But they said that they paid the taxes through the operation of their being in one way or other deducted from the rents before they ever came into their hands; which clearly might be true, even if carried to the extent of leaving the landlords no rents at all. What reality there may be in the statement of the landlords, is quite another question. But there is no natural absurdity about the statement; and to discover any, is the cake mistake, and nothing else.

flounce about with large words of sarcasm, concerning "heads containing the veriest elements of appropriate knowledge," and "as every civilized mortal is aware," and "during our terrestrial pilgrimage," and the like. There is a judgment on such as do these things.

The intimation that

> 'The effect of tithe is to diminish the efficiency of that check to the rise of price, which resides in the existence of inferior land, just by one-tenth of its natural efficiency; or, in other words, to allow the rise of price by one-tenth above the natural price,'—*p.* 700.

appears to be *ex nihilo nihil*. The naked fact is, that a certain quantity of land is kept out of cultivation by tithe; and consequently a certain effect is produced in raising prices, and if the land was not kept out of cultivation, would *not* be produced. But this effect is a tenth of nothing; except of itself multiplied by ten. And its absolute magnitude,—as shown by comparison of the probable quantity of produce kept out of existence, with the whole,—is to raise the quarter of corn by some fourpence; which is a very different thing from "allowing the rise of price by one-tenth above the natural price."

The proposal (p. 697) that the Corn Law should be modified to meet the advantages arising to the landlords from a commutation of tithes,—for a gain that would be found on examination very trivial, commits the error of appearing to recognize a right. No man who meditated taking the whole lamb out of the wolf's jaws, would begin by offering him market price for a cutlet.

Finally, it is recommended to all who follow after Political Economy and ensue it, to cultivate the habit of going *bride en main*, and not plunging hastily into conclusions of either truth or falsehood. If ordinary truth be in a well, truth in Political Economy is at the centre of the earth; or at all events among the lowest strata to which human eyes have had access.

WESTMINSTER REVIEW, 1 April, 1833.

ART. IX.—*Fourth Supplement to the Article on the "Silk and Glove Trades," in the Westminster Review for 1 April, 1832.*

THE "True Sun" has given six rather extensive articles, under dates between the 3rd and 8th of January 1833, in reply to the observations made on his arguments up to the 24th of December 1832; for which reference can only be made to that paper, as a small return for the pains taken by it in bringing the subject before the notice of the public. On one point only

does there seem to be any necessity for a distinct reply. When an assertion of "wilful misrepresentation" is brought forward, there is a rather extensive interest excited to see how far the case will be made out. What is one man's luck to-day, may be another's to-morrow; and therefore the matter becomes something of a common stock.

It is wearisome to be printing and reprinting; yet it is better than uttering what no conclusion can be drawn from. The object in what follows, is to invite any person who is not a deaf adder to such a subject, to determine for himself whether there was the smallest necessity for understanding the writer in the "True Sun" to mean what he says he did; and consequently whether there was any fitting ground for an assertion of wilful misrepresentation.

'On a former occasion, the Reviewer had observed, "that there is no reason in saying a man shall be protected, while he is producing, but shall be robbed whenever he begins to enjoy." To this, we replied, that the unproductive classes had not a *better* right to be protected, when they "begin to enjoy" than the labouring classes have to be protected, "while they are producing"—that the labouring classes were not protected, while they were producing—and, therefore, they could scarcely be expected to consent, that the unproductive classes should be protected, in their business of enjoyment.'

'What is the Reviewer's commentary on this?'

"In this, there is a palpable double sense. 'The productive classes are not *protected*'—that is, allowed to make the useless robbery of one another, which is recommended to them: 'why then should they consent to the unproductive classes being *protected*'—that is, saved from being uselessly deprived of what they have, to see it thrown into the sea."

"We will not again dwell upon the fallacy, so dear to the Reviewer, that a protective system is a robbery of the protective classes, by each other—but we will observe, that the Reviewer has wilfully misrepresented the sense of our expression, that "THE PRODUCTIVE CLASSES ARE NOT PROTECTED WHILE THEY ARE PRODUCING." "Protected" from the rapacity of tax-collectors, not from the competition of foreign manufacturers?—*that*, we expressly stated to be the sense, in which we, on that occasion, used the term "protection." The passage stood thus:—'

"The Reviewer says, there is no reason in saying, that a man shall be protected, while he is producing, but shall be robbed whenever he begins to enjoy. There is no reason, we apprehend, in tolerating the robbery of any class—but that is not exactly the question. It only remains for us to decide, whether, under the system of wholesale robbery, which Governments have practised so long, it were more for the general advantage, that those who have produced, or those who are still engaged in the business of production, should be robbed. The free traders, be it observed, have given it as their decision, that the balance of advantage is on the side of robbery perpetrated upon the productive classes."—*True Sun. 5 Jan.* 1833.

Now in all this, who was to know that the author meant "Protected from the rapacity of tax-collectors, not from the competition of foreign manufacturers;" and in what place is that "expressly stated," or stated at all? For instance, by the words "under the system of wholesale robbery, which Governments have practised so long," who was to surmise that the author in the privacies of his heart meant taxation, when the question was understood to be about the injustice of free trade? When a man has let out the fact that he meant so and so, it is possible to conceive that in these passages he had such and such a thing in his eye; but before an assertion of misrepresentation was founded on it, it should have been proved that the meaning had been previously set forth in such a manner that the uninitiated were bound to perceive it upon view.

The writer in the "True Sun" is so far from having a distinct idea of what he meant himself, that when he goes to his defence he does not make it, and somebody else must make it for him. He never, after all, quotes the passage which really contains the key to what he meant. In a passage previous to any of those he has quoted in his own support, he had been talking of "the robbery consisting in subjecting particular classes to a large share of the pressure of taxation;" and this in all probability was in his mind, when he thought he had explained that by protection he meant the absence of taxation. But when the connexion was not visible enough to make the author himself appeal to it in explanation of his meaning, how was any other person to conclude from it that so and so was his meaning? "Protection" is a word which everybody is accustomed to hear applied to the raising a trade's prices by prohibitions; there is no reason therefore in demanding that anybody shall take it in another sense, without the clearest statement of intention so to use it,—and least of all on such a statement, as it did not even occur to the author to make reference to, himself.

Finally, if the "True Sun" is admitted to the fullest extent to re-model its passages,—what sense or propriety is there in saying that because the working classes are overtaxed, therefore they ought to take from certain other classes by a process equivalent to throwing into the sea? Will mankind never find out, that the way to remove one political evil, is not to play into the hands of the supporters of some other?

WESTMINSTER REVIEW, 1 April, 1833.

ART. XI.—1. *Sixth, Seventh, and Eighth Letters on Commercial and Financial Policy.* By Col. Torrens.—Bolton Chronicle.—Globe, Jan. 12, 16, 23. 1833.

2. *Letters on Commercial Policy.* By R. Torrens, Esq. M.P., F.R.S. —London. Longman. 8vo. pp. 80. 1833.

THE five letters cited by their dates at the head of the Article on them in the preceding number of this Review*, have been followed by three others. The second of these commences with what will generally be taken for a complaint, that "notice should have been taken of detached communications, while they existed only in an unfinished series, and before the practical conclusions, intended to be drawn, had been stated and explained."

The answer to this must be by saying, that the notice of the Letters arose entirely out of the author's having communicated to the Reviewer, that he was "going to attack the ultra free-traders;" which under the circumstances, was understood as an invitation to reply, and produced the answer that "*then* they should either be convinced, or be stronger than before." If the author had any particular wishes as to the mode, it is to be regretted that he did not state them at the time. To make a running commentary on a current argument, so far from being unfair, is giving all the advantages to the opponent. It is enabling him to support, explain, and repair, whatever in the earlier portions of his work may be found defective; and is certainly the last process which any man would hit upon with malevolent intent.

The complaint is followed by an indirect annunciation of the fact (about which, from what has preceded, it is plain there was neither mystery nor concealment), that the Reviewer was the author of the pamphlets entitled "True Theory of Rent," and "Catechism on the Corn Laws," published rather more than six years ago; and it involves what nine persons out of ten will consider as a plain and unmistakeable intimation, that the author of those pamphlets took their contents from Colonel Torrens's works upon the Corn Laws, and unjustifiably employed them knowing them to have been so taken.

'Though the Reviewer and myself have been for years co-labourers in the same field; though we have both written rather voluminously upon questions of Political Economy; and though on some of these questions there has been a singular and curious coincidence not to say identity in our opinions, yet it so happened, that to nothing proceeding from me, whether pamphlet or volume, did the Westminster Reviewer

* See p. 351 of the present Volume.

ever before *directly* allude. Whether the omission proceeded from accident or from design, I never took the trouble to enquire, being sufficiently gratified to find that the Reviewer was zealously propagating doctrines which I had previously endeavoured to establish.'

'A member of the University of Cambridge, a person not altogether unknown to the Reviewer, and one concerning whom he evidently entertains no mean opinion, published two pamphlets, entitled "*True Theory of Rent*," and "*Catechism on the Corn Laws*." These publications correct, where not original, and where original, not correct, though not of the highest order, yet are not destitute of merit, and entitle their author, when content to move within his proper sphere, to the character of being, not indeed a discoverer, but a useful distributer of truth.'

'The characteristic feature in these pamphlets consists in a correction of the Ricardo Theory of Rent, which identical correction, long before the appearance of these pamphlets, I gave to the world in my Essay on the Corn Laws. As often, therefore, as the Westminster Reviewer gave notoriety to the "*True Theory of Rent*," and "*Catechism on the Corn Laws*," or became the advocate of the correct portion of the doctrines which they contain, I was satisfied with the indirect and unintentional approbation thereby bestowed upon my prior publication. On such occasions, however, my gratification was not excessive when deviating into originality, the author of the True Theory of Rent has in that work fallen into so many errors, that the approbation of a Reviewer, coinciding in and identified with his conclusions, is but a doubtful and equivocal test of merit.'

The theory here advanced appears to be, that of any man's speculations for the last six years, all that agrees with the Member for Bolton's opinions *is plagiarism*, and all the rest worthless *because it is not*. The Member for Bolton is a literary Omar, and his works are his Korân. The "singular and curious coincidence," and the italics of the word "*directly*," are manifestly calculated to convey the impression described; and it is surmised it will not be denied that they were intended to do so. Now, though there is no necessity for assuming the airs of indignant virtue, because a "co-labourer" and brother officer, under the impression of that most unmanageable feeling literary jealousy, has hazarded a hasty accusation; there *is* an evident necessity, that after a man has been charged in two newspapers and a pamphlet with a dishonest and in fact legally punishable action, he should tell the public plainly that the charge is groundless. The world is so wide and the modes of occupation in it so various, that there can be no incivility intended by stating, that the author of the pamphlets named really does not know one word that either is or is not, in anything ever printed or composed by the Member for Bolton before the present Letters. It may be his loss; but it is the truth. The fact is, he set out with determining that he would read no

more books unless for amusement; and he has pretty well kept his resolution, and intends to do it. It would be hard indeed, if before a man was justified in publishing a pamphlet on Political Economy, he were bound to be acquainted with all that has been written on that thorny subject since its agitation. Every man who prints, does it at the hazard of having to say *Pereant qui ante me mea dixerunt.* In such cases, the claimant has the world before him to establish the fact of priority if he chuses; and it can generally be done by the easy process of a comparison of dates. But all this is very different from printing in two newspapers, that another man has pilfered the contents. Even verbal coincidences, if such there be, are very weak grounds for a conclusion; the probability on the contrary is, that where there was dishonest intent, they would have been avoided. Stranger things have occurred, and prove nothing. In the case of a writer who occupies much greater space in the eyes of the public than either of the present concerned, it happened that there was put forth not only a coincidence, but a *double illustration* in the same terms,—the chances of which, an algebraist would say, diminish in the duplicate ratio. The comparison of the policy of producing goods at an increased price at home, to the policy which should make *wine in hot-houses* as the means of encouraging *coals and colliers*,—appeared about the same time in a pamphlet of Professor Senior's* and in the Catechism on the Corn Laws, and it is not known at the present moment, whether the physical impossibility of either being copied, could be settled from dates or not; yet neither of the writers ever thought of uttering his suspicions of the other. Such circumstances when they occur, are rather valuable as specimens how near two vessels, holding their courses on the same chart of reason, may steer to one another.

A further peculiarity of the present case, is that the whole *corpus* in dispute, it appears was "a correction." As if one man was not likely to make a correction, as well as another. An error is pointed out in a balance sheet;—"*I* pointed out that error before; therefore it is impossible you should have known it, except from me."

But what is of much more importance than all this, is to know whether any light has been thrown on the argument on "being the *entrepôt* of the precious metals," which was stated in the last to be obscure. And here, when the objection was that the principle could not be made out, it was a disappointing answer to be told, that of "this important principle the author

* Lecture on the Transmission of the precious Metals. p. 2.

of the article seems altogether unaware." He had stated plainly that it was not made intelligible to him; and he is obliged to admit that he remains under the same difficulty still.

In one part of the Seventh Letter the writer appears to labour under that kind of misapprehension which is colloquially termed "getting hold of a thing the wrong way."

'The objection which the Reviewer urges against this conclusion, is somewhat extraordinary. He contends that the merchant will not consent to sell his cloth at reduced prices in South America, because, although the *commercial intercourse between England and Portugal is at an end*, he will continue his trade with that country, and there obtain for his cloth a million sterling as before. But the Reviewer must in fairness be allowed to speak for himself. To the question, will the cloth which was worth a million sterling, when sent to Portugal to pay for wine, continue to be worth a million sterling, when sent to South America to purchase an additional quantity of gold, he gravely replies.

"The possibility of the answer being favourable to the querist, depends entirely upon the supposition that the merchants will voluntarily send the cloth to South America, instead of Portugal, *when less is finally to be had by sending it to South America.*"

* * * * *

"The weakness of this is in taking for granted, without the shadow of a proof, and contrary to all the experience of Christian men on such points, that the merchants *will go to South America* with their cloth at all, if the result is to be, that they are to get less for it in the end, than they might have got for it in Portugal. It is like saying, for heaven's sake, fine a man for going to sell his goods on the Surrey side; for if not, he will go and sell for sixpence, what he might have got a shilling for in Westminster."

Whoever looks at this with a fresh eye, will see at once, that there was not a word of continuing a trade with Portugal after the *commercial intercourse between England and Portugal is at an end.* What was urged was, that the Member for Bolton's theory involved the supposition, that the merchants will voluntarily send the cloth to South America instead of Portugal, when less is finally to be had by sending it to South America than they might have got for it in Portugal; the words "voluntarily" and "might" manifestly implying the state of freedom of choice which exists *before* the suspension of the trade with Portugal. The question meant was merely this,—If the merchants sent their goods to South America instead of Portugal when they had their choice of markets, is not *that* proof that they would have lost by sending their goods to Portugal;—and can they do anything but lose, by being forced to go to Portugal against their wills? Misappre-

hensions sometimes arise out of slight causes; and it is not impossible that a comma which has been inserted in the quotation before the words "instead of Portugal," has had some share in the effect. Such an insertion is not to be held in contempt, since the mischance that befell the engraver of the prophet Brothers's portrait. The whole misapprehension will on examination be found to be on the Member for Bolton's side; the sounds of triumph which he utters would therefore all be capable of being turned against himself.

The merchants of the united empire say, upon the evidence of their books, "We find it more advantageous on the whole, to carry on a circuitous trade with France for wine, and with South America for gold to pay for it in, than to get wine from Portugal. People like the French wine so much better, and will drink so much more of it, that we find on the whole it is a better trade to deal with France than Portugal." The Member for Bolton proposes to make them a new source of profit, by putting a stop to their trade with France for wine; and then, he maintains, they or some of them will gain from some process connected with the price of gold. The merchants are requested to look over the arguments on both sides, and see whether the Member for Bolton has made out his case.

When the Reviewer represented that "nobody, except old debtors, has any interest against a fall of prices arising from an increase in the value of gold, and this interest is balanced in the aggregate, by the counter interest of the creditors," he uttered what everybody knows to be literally true; and the object of it was to say, that these effects are *all*, and that any further effects from alterations in the value of gold, of the nature of those maintained by the author of the Letters, are imaginary and unreal. The statement that a merchant cannot gain less or more than the customary rate of profit upon the capital which he employs, is true, but beside the mark. It does not prove that the *quantity* of his capital employed, and consequently of his profits at a given rate, is not capable of reduction. Propose it to any merchant in the city; tell him that the plan is to cut him off from the trade he finds most advantageous and confine him to that which he finds less; and then comfort him by saying that he cannot gain less or more than the customary rate of profit, and see if he will be contented.

The Sixth Letter is chiefly remarkable for the earnestness with which it maintains the fact, that by removing the prohibition on a foreign manufactured article, no manner of good will be done, except saving the difference of price to everybody that has anything to do with using it. As if anything more was wanted. And if there are people in England willing to act on

no better ground than this, why should the chance be so desperate, of at some time finding somebody in France to do the like?

The Eighth Letter appears to be undeniable, on the subject of the Corn Laws. But is every man to be charged with stealing the Member for Bolton's thunder, who lights on the conclusion that the Corn Laws are an evil?

In discussions upon literary subjects, the use of scornful and injurious terms goes only to create a prejudice against the user. There is not the smallest necessity for "co-labourers" in the Political Economy Club to tell one another they "chuckle and cackle over their intellectual abortions." It is not imperiously commanded, that Fellows of the Royal Society excuse one another by the habit of "performing the operation of writing, without performing that of thinking;" the well-known fact being that we all do the best we can, and "look for the hard words in the dictionary." Nor is it indispensable that of men of the same, or of any rank, in a profession which values itself on frank and generous courtesy, one should tell the other that "the notice which has now been taken of him is more than sufficient;" and least of all when the whole has been done by invitation. The inference from demonstrations of this kind in a disputant, is sufficiently known to be proverbial; and as the Member for Bolton's theory of wealth will undoubtedly find its way into the House of Commons, the interested on the other side are forewarned by them where to look for the reply.

WESTMINSTER REVIEW, } April, 1833.

ART. XIII.—1. *The Harmonicon, a Monthly Journal of Music.*—London. Longman and Co.

2. *The Giulianiad, or Guitarist's Monthly Magazine.* Nos. I, II, and III, for January, February, March, 1833.—London. Sherwood and Co.

THE days of *grands coups de lance* are over. Everything is now done by here a little and there a little; and periodical publications, like timely showers, translate the wilderness into a fruitful field by gradual instillment. Music, the youngest-born of heaven's benevolence, who toils not neither does she spin, but only fills her father's house with smiles, has, as is meet, no want of service here. It is excellent to be great, glorious, and distinguished in arts or arms: but the very phrase implies that this must be the lot of few. The leaders in war must always bear a certain ratio to their followers; and not more than six hundred patriots can by possibility be wedged into the House of Commons. There wanted something that all might join in

without crowding; and above all, there was one portion of the human kind and that the gentlest, cut off from most of the vulgar objects of ambition, which had great need of a field for healthful exercise and blameless rivalry. Such want is supplied by music; and this circumstance alone would suffice to make the art a favourite object of utilitarian care.

At the head of the list of periodical works, for extent of information and comprehensiveness of aim, necessarily stands the Harmonicon. He is the *chef d'état-major* of the musical forces. Nothing is too much for him, or too little. He can tell all operas, that were performed at all seasons, at every court from Petersburgh to the Tagus. He knows the Professor in Denmark, who plays the best fantasia in $\frac{5}{4}$; and commemorates the first public concert ever performed in Australasia. Of all musical speculations he is the great repository, from the gnarled mysteries of the scale, to the pin of a clavichord. Finally, he has the reputation of being the only English power that could ever rule the microcosm of the Opera,—*Panaque, pastoresque, Dryadasque puellas.*

If the Harmonicon is a chief of staff, the next is the leader of a small *manipulus* or company, which he is anxious to make the most effective its magnitude will admit of. And he manifestly has the root of the matter in him. The guitar is an instrument even now not comprehended in this country. People cannot find out, that it is an orchestra in little, a miniature painting of *le donne, i cavalier, l'arme, gli amori.* Its forte is the picturesque; meaning thereby the presenting of pictures,—*des tableaux.* It wants force, as a miniature wants acres of canvas, but is not the less a painting for that. A young lady with her guitar, is neither Mr. Harpur with his trumpet, nor the Petrides with their horns; but it does not therefore follow she is nothing. She may be compared to an artist who for some reason has no great depth of shadow at command; the keeping may be more difficult, but it is not impossible. The great countervailing power, is in the intimate connexion between the performer and the instrument, giving a command over the strength and quality of tone, which can scarcely be equalled but on the violin, and *then* there must be at least a trinity of performers to approach to the same effects. The authors of the "Giulianiad" (a crabbed name) have proved that they understand the thing. They are the first or nearly so, that have shown they comprehend the bounty of Providence in the guitar. On many points they go so close to what has been impressed in the present utilitarian organ, that it may not be misplaced to state that there is no community of

source. They are altogether a second voice in the desert, returning a responsive halloo to the other.

The music in their two first numbers, throws more light on what the guitar is meant for, than could be got by the pillage of a music-shop. All that bears the name of Giuliani is first-rate. Publish no tinkling; but give some organ sounds; some recitative in harmony; let us hear the evil power, the Ahrimân of the stage, grumbling in discords on the bass, and then the heavenly influences come to the rescue in sounds like those which told the magician of old time his guardian spirits were arrived. Since Giuliani is a voluminous composer*, he is himself a mine. But those who have mastery on an instrument can *improvise*,—much more write fluently what others have invented. What is wanted, is that they should open the portals of music to the student of their art. Why not begin by giving four pages monthly of some well-known opera, the Freyschutz for instance, from the overture to the conclusion; in such form as to be easily taken out and united? Musical men have a considerable degree of community of goods, and much picturesque music is impressed into the service of the pantomimes. Can no man invent a *Harlequin Voyageur* or other trivial machinery, which should enable him to string together in such order as should give most mutual relief, all that the stage has of grave or gay, ridiculous or sad? From this go higher, and to the highest. Give the *grande Opéra*, recitative and all, but cutting down freely where it would be wearisome, leaving in fact no more than shall give distinctness to the rest; and afterwards, sacred music. The Hallelujah Chorus in the hands of Huerta, would be like the last sounds before the angels grew too small for mortal ken; the clown that would despise it, would giggle at the sight of the Lord's Supper on a gem. Save a sweet female voice, no earthly instrument would sooner bring tears in "I know that my Redeemer liveth;" its power depending on the resemblance to the expression of mental emotion, supported by a moderate use of the ornament which is often so misplaced in singing, but is necessary to assist sounds not singly possessed of *sostenuto* tone. Instruct arpeggios to draw an organ's power from short-lived strings; give a chant, a mass, a funereal service in little. Bear still in mind, that magnitude is relative, not absolute; that music is not in noise but concord of sweet sounds; and that the lowest class of amateurs are the elderly gentlemen who count kettle-drums, and

* 148 *Opere*; published by Richault, Boulevard Poissonnière, No. 16, Paris.

go into fits at the crash of a certain number of fathoms of fiddle-string.

Another point of advantage in the guitar, is that it is in reality the most scientific instrument in use. None other, so inevitably leads to acquiring some knowledge of the innate springs and causes of harmony. A pianoforte is a box of prepared sounds from the shopman, from which no art can extract any idea of origin or relation. The guitar is six monochords, if the Hibernicism may be allowed; and the dullest perception, though unprompted, can scarcely fail to arrive at some ideas of cause. It was time for some stimulus of this kind; it was dull climbing to a school-girl's pitch of lesson-playing on the spinet. Much is to make out in music yet; there is the theory of temperament to overturn; and the singers and violinists have yet to know the ground they stand upon, and force the players on pipes and psalteries to follow and not to lead. All that tends to this end is a good; and all that leads either old or young to ask *why* certain lengths of strings make music and others do not, has a tendency to it which nothing can conceal.

WESTMINSTER REVIEW, 1 April, 1833.

ART. XVI*.—*Cruchley's New Map of the British Isles.* Engraved and published by F. G. Cruchley, 28, Ludgate street, St. Paul's, London.

WHEN the people of an extensive country are irritated and full of complaint,—which in their own phraseology is always being oppressed, though of course no man will be found to own to the cognomen of oppressor,—one of the first things a considerate individual does, is to look into the map. The collection of old almanacs out of which mankind makes new ones,—history,—points strongly to the fact, that no numerous people was ever oppressed in perpetuity. There are constant causes in operation, to equalize the struggle; of which it is enough to mention one, the continual desertion from what the oppressor trusts to as his allies, and siding with the sufferers. In these times nobody is to be trusted to work oppression; there is no telling in what strange place the opposition may break out; it may show itself in the camp, the court, the field, or the workshop; even the pulpit is not entirely to be depended on. Every man that now-o'days insists on riding a hobby-horse of wrong, curvets on the crust of a volcano;—and might see the fire

* This Article was circulated and sent to the newspapers, before the Third Reading of the Irish Coercion Bill in the House of Commons, which was on the 29th of March, 1833.

shining through the cracks, if his brains could direct his eyes between the hoofs of his Bucephalus.

Now here is a larger island and a smaller,—bearing to each other in rough numbers about the proportion of three to two,—so that their strength in union is as five, while their strength in opposition is as one. And the governors in the larger country, after having been raised by the popular aid to a triumph over their bitterest opponents, can find no way of using their newly given power, and no means of letting off the exuberant energies they are afflicted with, but imitating the practice of their enemies in making a "raid" against unhappy Ireland. Where was the necessity; what was the urgent motive? Could not any given minister have amused himself with a battue somewhere else instead? What manly reason will they give, when history holds them up for little boys to point at, why nothing could serve them but making a set at Ireland? Ireland was going on, not very well, but very much as usual. It had been fully agreed, that the time was come for removing some of her causes of complaint,—and it was on the very promise and engagement to do this, that the present ministers had been raised upon the shoulders of the people. It was a thing settled and determined, that Ireland had been scourged and manacled into madness; the Tory doctors fairly gave her up, for the more they coerced the more she raved, as was only right. The English people, thoughtful, sensible, and good, called out to try conciliation, and brought forward a new race of doctors with that very view. They said, "It is plain coercion only does harm; manacles throw the patient into convulsions; there has been much ill-treatment,—you cannot wonder at it. Try something kind. Do a little that may look brotherly." Whereon say the board of Machaons,—"We will begin;—we will conciliate, but it shall be in a straight waistcoat;—we will be brotherly, but we will have the patient on the floor;—depend on us for the best intentions, but we must let off our foolishness our own way."

When men follow a course of this kind, it is always on the presumption that they can and shall coerce the sufferer to the end. Presumptions of this description have in all ages been the seed of independent nations. Whenever a great revolution is to take place in the political relations of masses of men, nature is put to the expense of turning out some half dozen of rash gentlemen to be dry-nurses to the change. There is no preventing this; on the contrary it is a reason for seeing in all a superintending Providence. It is the order of nature; which cannot be an evil. And the way in which these agents of nature's progress attain to their desired result, is always by

miscalculation of their means. They trust to something supporting them, that turns out neutral; or something being neutral, that turns out against them. For example, in the present instance, the assumption is, that the people of England would have a great objection to the independence of Ireland. If query why,—among other reasons, because Ireland would probably be republican. Now both these are rotten sticks,—mere props for old women in pantaloons, which will break and pierce the hands that lean on them. It is very true that the people of England do *not* desire the establishment of republican government either in Ireland or here. But *why?* Not because there are not great masses of them that are conscious that by the irresistible extension of knowledge, to republican government, in name or in substance, all in the end must come. Not because they are not deeply conscious of the inbred and inseparable infirmities of the monarchical principle, and the many ways in which it opposes the reasonable connexion between the end of governing and the agents. But singly for the reason that makes a man desire to live in an old-fashioned and smoky house, rather than incur the risk of expending twice the value of the difference in pulling down and rebuilding. It is not *the object*, that they fear: but *the going* to the object. And the same in respect of Ireland. There is no considerate and independent Englishman, who does not know, that Ireland has in all ages been a warren of the aristocracy's, and by that very fact an injury and loss to England. There is none that does not know, that if Ireland had at this moment a government as totally separate as that of the United States of America, the two countries would be in a situation to enjoy all the good derivable from their geographical and physical conditions, and avoid the evils of their present state. They have had centuries of evidence, that the aristocracy of England are utterly incompetent to the task of governing Ireland, in any way that does not render the connexion an abstract curse. But they fear a greater curse behind. Knowing the strength of parties, the animosity of interests,—they dread the process by which the abstract blessing of the separation should be brought about. They weigh evil against evil; and they decide that the smaller evil, if the ministry could allow of it, would be to continue as they are. In short they think that no prospective good would be worth a civil war. But if the ministry make a civil war in *gaieté de cœur*, what becomes of these objections then? If civil war there is to be, why should not the English people wish to see it take the advantageous turn instead of the disadvantageous? Is there no impressing on ministerial imaginations, the difference there is between that attachment to an

existing state of things which depends upon the dread of contest, and the attachment that is left with men after the contest has been forced upon them?

The military situation of Ireland is probably nearly this;—That if a contest were commenced in which free access was given to the relative strength of the two parties, the shock from the organized force actually in the hands of her assailants, would be such as Ireland would have no physical chance of resisting. But if anything should happen to blunt the operation of that first shock, and give Ireland one clear year for preparation at home and for the operation of cool reflexion in the masses of the English people,—the chance of ever overpowering Ireland by force, would be just where that of overpowering America is;—the Honourable Napper Tandy or anybody else, might put on his bag and small-sword when he pleased, and prepare for presenting himself at the English court as Mr. Adams did. The reasons are strong, why both sides should avoid the contest; yet these are the risks and chances a few aristocratical persons insist on running against. And because they are backed by a shoal of shallow men of good estate, who would believe in any green-bag necessity a ministry chose to detail to them, and consent next month to any mode of creeping out of the danger they had hatched,—they feel bold and cheery, and think the trampling a gallant nation of eight millions under the iron heels of courts-martial, the natural'st thing on earth. They know full well, that if they were to attempt such practice with the English people, the country would run *a muck* against them,—mothers would bring forward their sons, and charge them to come back no more, till the ministers were quaking for their heads like the prisoners of Ham. But because Ireland is a smaller country, they think the ill must be submitted to. In this they are in one sense right; for the theory of resistance has not been so often discussed, without coming to a pretty general arrangement on the circumstances which justify it. For a weak nation to resist, is a *fault*, and therefore a *crime*. This connexion of things may not hold good invariably; but it is the allowed theory of political resistance. But how foolish is that government, which puts itself into the category of injustice, in reliance on its strength.

Another ground on which they possibly calculate, is that the Irish could never agree among themselves, and consequently one of two halves would be on their side. But this is not to be trusted in too much. National independence is a tempting thing; which is a proof it is a great good, where overpowering obstacles do not oppose. Men will sacrifice a great deal, even of their prejudices, for the sake of the brilliant chances held

forth by such a consummation. The probability is, that as relates to internal politics, two parties in Ireland would be nearly balanced. The inference thence drawn in Ireland might be, that one should seek the aid of England to cut the throats of the other; but they *might* also happen to find out, that it was for their mutual interest to treat each other handsomely, and set up the orange and green in loving union. The position of the Irish church revenues might seem to be an obstacle; but suppose Ireland should take the freak, of applying these altogether to setting up her new housekeeping, making such settlements only as should satisfy existing occupants, and agreeing that all sides should pay for their own divinity as they may want it. There is nothing in this so improbable, as to make a man leave his mouth open on the chance of what may not come in.

If the measure of the talents which bring these perils on the country be desired, it may be found in the miscalculation of what the legislature (which is not the country after all) would endure and what it would not. To have shown their teeth, for the purpose only of proving that they could not bite,—to have given the exact impression of what they *would* do, and up to what particular point it was checked by what they dared not do,—is a folly few have committed since the giants of John Bunyan. All the other proceedings are of a piece. Not the slightest assurance is there, that after they have carried their bill of inflictions, they shall ever carry their bill of conciliation at all. Men with the wisdom of a parish clerk, would have seen that the way to prevent mischief was to ensure the conciliatory measure first, and let the other follow; or at all events take care the two were contemporaneous. It is strange if such leaders do not find a pit to tumble into. When soft heads and timid hearts in Parliament congratulate themselves on giving powers to such trustworthy ministers, what reasonable assurance have they that they have not been spreading a bed for their enemies to roll in? Suppose the Tories throw out the bill on the Irish Church, as why should they not;—what nook will the ostriches thrust their heads into for their salvation afterwards? Human affairs are not carried on in this way. If any of the members of the government sigh for glory, or otherwise possess an irrepressible activity, they should be sent fox-hunting, or presented with a new Manton; but not allowed to make eight millions of human creatures their field of fame. Why will well-meaning, good sort of people, never take advice? If they would have asked the English republicans, at least the moderate ones,—men who have neither fear nor shame in avowing their principles "by any kind of light,"—*they* would have said to them,

"You have just got the Reform Bill. Whatever you do, avoid stirring first principles without occasion. Keep things as quiet as you can, and so will we. You know the bargain was to try the Reform Bill, and its quiet, easy-going results, to the uttermost; and we are here to keep it. But do not *you* raise any gigantic questions. Try to soften things gradually, and give us the substantial good of a republic under the forms of monarchy. You know we do not care a great deal about the matter, and should on the whole perhaps rather enjoy the playing out the play the other way. But still, we are "wae to think" on the confusion that might arise. Keep a soft rein, and see if the world will not go on without. If you will not, we must act according to the throws that turn up; but we do not want you to cog the dice. Keep well when you are well, if you have wit. There is plenty to alter and amend, to keep you in employment for the average life of man; you will not be so silly now, as to invent some crusade as the Tories did, by way of putting off compliance with the people's demands. Think what the Tories got by the invention; and think what you will get by the invention in the end. If you were to do such a thing, you would be very likely to give a fillip to the whole future course of history. Men may hereafter talk of "the vast change in the face of Europe, which arose out of the conduct of the Whig ministry after the Reform Bill." You have a very rotten house over your heads; tread gently, and do not dance sarabands in it more than needs. Besides, you do not know what may be coming. The French government exists only from quarter to quarter; and you have no notion what a muster there might be, if a change in France were to happen in the nick of time for setting republics "two and indivisible" smirking at one another across the Irish Channel. Look too at your people at home. Have not your landlords brought you to the very eve of an agrarian war? Nobody will insure you upon Change, that you shall not have a Jacquerie within twelve months. In the West Indies, three years have been assigned as the natural term of a tyranny; you may have something there to do, either with master or with man, that would fall in awkwardly with your crusade. Gentlemen, good gentlemen! honest, well-meaning, round-sterned gentlemen! reflect how pleasant it is to lie in bed on a rainy morning, and not have to mount one of your own coach-horses and ride over brake and fell to get your brains let out by some stalwart rustic with a scythe-blade, or be shot through a hedge with an old pistol with the lock tied on with packthread since last rejoicing-day. Hunt, eat, drink, shoot, speak, fiddle, sell fatted calves, do anything to amuse yourselves except getting up some strange question that will be too much

for you. Your enemies are keen dogs,—a bull-dog to a turn-spit to you; nothing supports you but your homely usefulness, and the affections of the roast-meat-loving public;—they will play you some dog's trick, as certainly as ever you play the fool. Nature never meant you to be magnanimous; it meant you to be good. Go on in that course, and defy the devil and his works; but if you forget yourselves and take to the tricks of those you have turned out, depend on it that all men everywhere will look out in hope and expectation of seeing you get some prodigious overthrow. There will be ballads made about you; there will indeed. Now don't have ballads made about you, when you might just as well be quiet and live respected by your neighbours."

Assuredly, if a man had endeavoured to guess the most unlikely things, he could not have hit on the idea that the Whigs, after all they had done and said, would have been for going "colonelling" in Ireland. He might have fancied the Archbishop of Canterbury pouring out the unknown tongues at Mr. Irving's meeting-house; or the Member for Oldham circumcising himself on the eighth day after the Jew Bill was brought into parliament. But he never would have devised, that the eloquent and pacific Whigs,—the men who had so constitutional and long-standing a horror of the triangle and the walking gallows made of commissioned shoulders,—should have been for disgracing their earliest course by resorting to such beggarly elements of exploded tyranny. The *facts* are all against them; nobody wants their courts. The ordinary civil courts are going on with their occupations just as ever. It is not courts that are wanted, but witnesses. If the military courts are to do anything not done by the others, they must make the evidence as well as the decision; they must perform the operation demanded by the Babylonian legitimate, who wanted to be told "his dream" as well as "the interpretation thereof." If the "Rules and Regulations, Hoyle's Games, and the Army List" have taught the captains of fifties to perform this feat, it will be a new and ministerial road to knowledge which nobody had thought of. But unless they can do this, there is no more pretence for employing them at all, than for sending a spurred and whiskered bench into Yorkshire. The truth probably is, the Whigs have made a cake and somebody must eat it. They have concocted with great pains a laborious measure, and though the plums and the ginger have been pretty well picked out in committee, somebody must swallow the dough and the suet. It is an awful thing personally, to stand in this position to a ministry.

One inference the British people must make from the whole,

is that they *want a Constitution.* Some years ago they had something talked of as such; but the people of England do not want *a bad Constitution.* The old mischief being removed, they now want one for good. *A Constitution,* is a code of laws the governors dare not break. It is a bound hedge assigned to the church-wardens and office-bearers of the state, by the sovereignty of the community saying to them "Hitherto shall ye come and no further." As it is, Englishmen hold all they have, by the discretion of a few hundred very indiscreet gentlemen. The aim and object of a constitution, is manifestly to embody the great lessons of history, and correct the vagaries of men acting under momentary fears and instant impressions, by introducing elements derived from the world's larger periods. Everything is a crisis, to a member of the sitting parliament; no man ever held a situation of such responsibility before, or was so well entitled to make all reasons bend to his necessities of state. Now the grand warning of extended experience is, that men who are allowed to do certain things, always do wrong. No man looks, for instance, on a suspension of the Habeas Corpus at any period gone by, but as an instrument for doing mischief which might have been prevented if the government could not have suspended the Habeas Corpus. The ministry says, "We cannot go on without." The unflinching decision of History on which is, "Then you ought not to go on." Some governments cannot govern without torture,—some without *ex post facto* laws; all bad governments have a morsel of some kind which they roll beneath their tongues, and plead they cannot go on without. The verdict of mankind, not uttered by hourly installments, but given every now and then in a voice like that which shook the Bourbons out of their tapestried halls, is that they know no reason *why they should.* The defect is in supposing that it is for the good of mankind they should go on;—in not seeing that the legitimate inference is, that they ought to be changed for those who can do better. Constitutional liberty, means having a government that shall be obliged to govern within certain rules. If you say you cannot,—dismount and make room for those that can. Imagine a man saying, "My dear courser, I cannot ride unless I may have a bitt that will pull you on your haunches every time I twist my little finger; I must have a pair of spurs *à feu d'enfer,* or I cannot be responsible for keeping in the saddle; a whip of course, is a necessary of life; you must be prepared too to amble with your legs tied together, whenever I may wish the same; in short you must give up the totality of your *habeas corpus* whenever I desire; it is on these terms alone, that I feel myself competent to take an airing; you must agree to all

this, or you are an undone horse." If men were horses, such argument might do; but it lamentably overlooks the difference between equine and human reason. Why should men go without law, because their delegated lawgivers chuse to be lawless? Is it a reasonable confidence in their lawgivers,—any more than it would be reasonable to leave it to the steward of an estate, whether there should be an estate at all? The case is plain,—the Whigs have undone the bag;—*We want a Constitution.* The world at large is only beginning to grope for knowledge of what a Constitution is. Most seem to think it means a form of government; and in England circumstances have not been such as to direct attention specifically to the difference. The case may be altered now; at all events the times are favourable for throwing light upon the question.

England, then, is just entering on that phasis, in which most of the continental nations have preceded her, of feeling for a constitution;—that is, for a code of rules it shall not be permitted to the acting government to break. Whether this can be effected without a crisis, or without waiting for a crisis, is what time only can decide. But the actual government has decided to draw men's minds to it in the strongest way that can be done by human art. It is plain that English as well as Irish, hold the administration of civil law by sufferance. It only requires a ministry with a point to push by martial law, and by martial law it will be pushed. The interest of Englishmen clearly is, that a ministry which cannot carry its point without martial law, shall have its *Descendas* before it puts its hobby into that movement. Our forefathers had constitutional restrictions, and so must we. Theirs might be adapted to their own times; but they were obsolete, gone-by, and harmful in ours, and therefore they were wisely superseded. We are left therefore in the gap between the pulling down a bad constitution, and the setting up a better;—not by raw, rash acts of guess-work, but by turning the public mind for some half dozen years next following the Irish invasion, to extending, first, the knowledge of the gap,—next of the thing wanted to fill it,—and lastly of the means of substantially obtaining what is wanted. It is not enough that there should be a vague horror, of martial law and similar extravagancies. Experience has shown in all countries in the present state of Europe, that it is in the nature of a representative government to push forward numbers of individuals, of large fears and narrow views,—mere *gobemouches* of all kinds of terrors,—men nursed in the lap of peace and affluence, and ready to decree by acclamation any measure of injustice, which they think will act as a blister on some distant part of the body politic and secure their own,—

quiet cool men, ready to order a civil war any morning as they munch their breakfast, if the minister tells them it will conduce to the safety of their supper. Such men work admirably on a parish bill,—are the hope of their country upon a question of drainage or inclosure,—but utterly incompetent to be the depositaries of the personal freedom of their countrymen, and the guardians of the *Habeas Corpus*. In fact the *Habeas Corpus* should have no guardians, except the bodies that it guards. A proposal for touching it, should be an act of resignation of the existing government. Look forward some score of years, and think what will be the world's opinion of a country, where the law was that law was suspensible,—where the denial of justice was part of the required powers of an administration for the time being,—where it was possible to hear and think of such monstrosities as making a law that no man should have remedy against the actors under a given Act. There is a large gap in the ideas of a society where such things can be dreamed of. And for what end, but to enable a minister to do, what everybody ought to wish undone; to gratify some personal ambition, some restless energy, or at best to secure the execution of some darling wrong? If the people of England go on not finding out that they are blind and naked, it can only last till some daring scheme against themselves opens their eyes to their condition. The landlords, for instance, have martial law in their view before they will give up the Corn Laws; they fat their yeomanry horses for that very chase. By their Irish bill, they cut off the fellow-feeling of two-fifths of the united country, against the hour of England's distress;—a deed of generalship on a large scale, and worthy of agrarian genius. With the same tameness that the gross and pursy *juste milieu* see Ireland invaded, they would see Yorkshire, if the same wisdom told them it was necessary, and their particular toad-stool was in a southern county. There must be an end of this "tyranny avowed;" for it *is* avowed,—the records of Parliament are there to state, that the Whigs came forward and avowed it was a tyranny and a gross one, and *for that they liked it better*. There has been no shuffling; the thing has been laid down in its enormity. Evil may be our good, as well as the Whigs'; the chances are all the greater that the English people may think of laying it to heart.

What would be thought of military leaders, who, after being brought forward by the people on their shields in an hour of crisis, and then invited to go forward and show the way to reaping the fruits of victory, should say "Stay a little; we must commune with the enemy, and get his help, bitterly to coerce certain battalions of you. We must try to please him;

and if we propose more than we follow up, you must understand that it was to appear willing in his eyes, and prevent his point-blank refusing to co-operate. The secret of directing an army, is always to have the enemy in the plot. It tends to peace, and the orderly settling of things; as you will see." This is precisely what the Whig leaders have done. They know that a people at large is a slow agent; disunited, and each part easily induced to act against the other; a very tool for tricking, except in those rare moments when the strategic spirit rushes on every private of the force in the shape of one irresistible cry of "Forward." The salvation of nations is, that governors always miscalculate this point. It comes on them like a thief in the night; when the good man of the ministry least dreamed of its arrival.

The ministers are possibly mistaken in thinking there is as little feeling out of doors for Ireland, as in the houses where the liberties of the country are made and unmade. The English people have viewed the Irish as their fellow-labourers, and in fact the turning-point in their Reform. Numbers of them are filled with recollections of Irish gallantry and Irish good fellowship; things are not where they were, when an Irishman was a hobgoblin of the stage, a sort of Helote, whether in the higher or lower classes, produced to flatter English superiorities. The ministers had forgotten the steam-boats, when they went back to Tory times for precedents. They overlooked the host of Irish writers who had as effectually linked the feelings of Englishmen with the merry misery of the Irish peasant, as with the grave endurance and stout resistance of the Scotch. The strong and general feeling in England is, that all Irish misery springs from wrongs. Those who have seen Ireland, know it; and those who have not, take their word. An insolent ascendancy, of just such a kind as if the Normans were prancing about in chain mail to this day in England, and backed by an insulting church establishment of the same nature as if catholicism had been established by "Colkitto's" myrmidons in defiance of the English nation, keeps the vast majority of the Irish people in the situation of slaves looking to all points of the horizon for any aid that will break their fetters. If something is not done, a fleet of steam-boats from the United States will some fine morning be the Euthanasia of the Irish struggle.

The ministry in fact have staked their existence on the dice. If heaven sends them all sixes, they may get on; but if there comes the smallest check, they will discover the rottenness of the position nothing could hinder them from taking. They have gone on against the loudest avowals in the House of Com-

mons, that the occasion justified resistance far more than their own applauded case of America. No such phænomenon was ever exhibited before; a people was never pushed upon a civil war by a House of Commons, one side of which took glory to itself for the monstrosity of the tyranny, and the other virtually avowed the duty of resistance. Such an intensity of weakness, was reserved for Whiggery. What will come of it, those that live will know; but it is a glorious prize for the active "movement" party; it is *nuts* for the zealous republicans, here and everywhere. The more moderate ones would have gone down upon their knees to prevent it; but what can they do,—can they arrest the course of fate, or pretend to stay the optimism that is in the world? Submission was made for man; and if Providence have chosen the Whigs for leaders into the promised land, there is nothing left but bowing to the dispensation.

How small is the use of history,—to those who have neither ears to hear, nor eyes to see. No statesman, however bad, perhaps ever failed to speculate upon a niche. Laud with his *Thorow*, and his fellow-workman Strafford, undoubtedly intended to occupy a lofty station; and so they do, with the trivial accident of losing their heads by the way. Much of the merit of a measure is in its exit; and those who put on their harness, are not to boast as those who put it off. The ministry have chosen to harness themselves against poor Ireland, and will most probably succeed in their immediate object of putting down; but they have laid the foundation of changes, of which they must have a long telescope to see the end, and which are very likely to be as anti-Whiggish in their termination as their worst enemies could desire. It is plain the Whigs are one of three not very unequally balanced parties in the country. One of these was their natural enemy, and must continue so; not even hostility to the people, could appease the wide enmity and leave the Whigs in possession of the spoils of place. With the other party they have now broken, as far as regards any substantial confidence or faith. The Radicals, (who are the masses), must play out the game, stepping on the shoulders of either enemy that will oppose the other, and trusting to the good use of opportunities to resist them both. The position is at least an interesting one; and since the Long Parliament, the reasonable friends of popular rights never stood so fair before. They have all the benefit of the game, without the responsibility. Eight millions of people have been taught to look on them, as those that would have helped them if they could. The represented may have been slack, but the representatives in Parliament have not. They have stood well to their work,

and some good knights have won their spurs, to be used with better chances another day. If the Irish are wise, they will not despond; still less break off communion with the cause of freedom in England. We are all in the same net, and there is nothing to be done but gnaw a mesh asunder where we can, without asking whether Jew or Greek is to have the instant benefit. There is no use in getting into a passion with a nation; there are good and bad in all, and the good do the best they can, and the bad the worst. Strength is in union,—and in the eschewing of that basest of all policies, the true test of enemies in disguise, which props up one evil by descanting on the non-removal of another. Drive the pick-axe wherever it will go best and farthest. He that shakes slavery in the West Indies, gives it a push in the half-way house of Ireland; and commercial freedom at Liverpool, will re-act on the equality of creeds throughout the empire.

It may be urged that many of these considerations are too late; though it was no fault of this Review if the ministry would not wait for the First of April. They may be too late or not; it is uncertain as all things are. In one shape, however, they are not too late. If the ministers have thrown the die in the legislature, it is not absolutely impossible that they may still possess some influence over the execution of their own laws. They cannot be expected to have much; for as they never had the vigour to put a new garrison into the Horse-Guards, they must look for everything from that source to be directed in the spirit of bitterest hostility. If there is the ministers' man, there will be the Horse-Guards man to look after him. Woe to the individual, who shall have any ambition to serve again, and shall do the Lord's work slackly in Ireland. A mark against a man's name in the list of promotion is not so easily rubbed off, as that it should be incurred for other men's convenience. The army have no scruples upon such influence; they do not do it in ill intent, but in innocence. It is not long since the writer of this was president of what is called a "General Regimental Court-Martial," in Ireland; and a superior officer directed him to "Tell the Court it was the General's particular desire that this man should be tried by a *General* Regimental Court." And on the hearer's looking what was taken for non-comprehensive, the words were repeated in the benevolent tone which is meant to give a stupid man the chance of understanding at twice, what he fails to do at once. Now the meaning of this, in plain English, was, "Tell the Court it is the General's particular desire this man should be transported if they can;" for what is called a *General* Regimental Court has the power of transportation, and what is simply called a Regimental

Court has not. Now suppose this president had refused. In two or three weeks, he had to appear at an inspection before the General that "particularly desired;" who had it in his power to do all a man prepared, can do to puzzle another that must act upon the moment;—who could demand of him to perform everything that was obsolete and therefore not practised, and everything that was new and therefore imperfectly known,—and who upon the slightest failure, could make a remark against his name which should attach to him for life. In two or three months, he had to present himself to the other superior officer, to request him to certify that he was a proper subject for promotion;—was it likely that he should offend him by any useless violence of virtue? And all this was done in no ill intent. There was no malice, no cruelty designed; it was the simple exertion of what military persons think the fairest of all agency. The actual agents were the most regular and orderly of men; pure military automata, that would not commit themselves by an irregularity, if they knew it, though it was to save a nation. But how many Irishmen will be sent before the Whig courts-martial, with a recommendation from the General commanding? The officers likely to be appointed after all the cutting-down that has been practised on the Bill, may not be precisely in the situation above described; but they will be in one closely akin to it. If one sharp confidential man be put forward by the Horse-Guards into each court, there is an end of the independence of all except the martyrs. There is no doubt that military officers may decide with great impartiality when there is nothing to bias them; but the question is, whether they will decide so when *there is*,—and whether they are not, of all living men, those who if they act independently in circumstances of trial, must do it at the greatest expense of individual prospects and well-being. When evidence is brought before the House of Commons of the evil deeds of courts-martial in time past, it is quashed on the ground of pain to relatives. It will be much more painful, to the relatives that are to come. There is wonderful nicety about what is done and over; and equal carelessness about what is still to do. It will be vast consolation to the relatives of those who are to be transported for being out of bounds, that Sir Edward Crosbie's relatives were spared the pain of hearing his murder commented upon with indignation!

Where a larger country holds a smaller in a legislative union, it clearly ought to do one of two things,—either make the union comfortable to the smaller country, or quietly give it up. All else is tyranny; and tyranny does not last; and what does not last, is sure to fall. Men cannot and will not go on in the

old throat-cutting way; and so the Whigs will find. There must be reason, there must be some aim for the public happiness, and for such causes men will fight. But they will not fight for the convenience of a ministry; or not fight long. The ministers may hold out "to the death;" but they may die by themselves. The fighters may be willing to fight; but who will keep the fighters? Two-thirds of the British people believe the objects for which Ireland is deprived of law, to be decidedly opposed to their own immediate interests. They not only do not believe in the necessity, but they believe against it; they believe that if the truth were told, the necessity would be the other way.

The great comfort in all this, is the certainty that final good will come of it. It is all only stirring the soil, for the great harvest of human advancement. Who knows, but it is destined to advance the cause of rational government by half a century? All great goods have sprung from great ills. The evil is great enough; and it only remains to see whether there is the usual connexion with the consequence.

A curious contrast is all this time presented, between the ardour of the ministry to resort to extreme measures in Ireland, and their placability where the Crown and people of Great Britain are really suffering wrong and insult. A race of colonial bullies whom nothing but the interference of the British administration prevents from being crushed like cockroaches by their own negroes, may insult the head of the government and organize associations for illegal violence upon their countrymen, and the ministers as meek as mice shall be arranging with the home branch of the cart-whip dynasty the price at which they will consent to abate their nuisance. The whole horse has been paid for by the British public by a poll-tax, and when the question is of substituting working in harness for drawing by the tail, the ministry is in negotiation with the barbarian for paying him the price of the horse over again as the price of his consent. The slave-owner, whose slave and all he has, have been bought for him once out of the pockets of the British public,—is to be told he shall be paid the price over again, on condition that he will consent to employ free labour afterwards. Why is not he rather charged with the difference between the expense of slave labour and of free? And why is not he asked to lay down the cost of protecting him from the just retribution which his own obstinacy has brought almost upon his head?

How much money has been paid by the British labourer and manufacturer, to support slavery already? Let us see a balance sheet, in which this and the other items named shall be put

down; and then show how much is owing to the men of the cow-skin. Will not the Irish members help us in this? Cannot some confidence be put in them, that they will stand up in a mass in defence of the general empire upon this point, and trust to the gratitude of the whole community when the time shall come for showing it? Let them consider well, how strongly this would tend to combine the general interest with theirs. Let them reflect in what numerous classes, hostile it may be to them hitherto on many points of belief or prejudice, this would quash the feeling of distrust, and substitute the confidence of fellow-labourers in one great cause. If the Irish members will come forward as one man, and stand in the gap between the English people and their enemies on the West-Indian question, whatever may be the event they will not fail in one point,—the securing an adhesion to the cause of Ireland, which first or last will vastly overbalance the puny efforts of the cabinet to raise themselves in the eyes of their enemies by the depression of a gallant people. All good feelings will join and link themselves. The hearts of the legislature "thrill at Poland;" but considering "the condition of the country," "the distress," &c. they cannot reconcile it with their consciences to grant any public money to assist the persecuted Poles. *They will have no such scruples with respect to the persecuting West-Indians.* At this moment, unless all surmise is wrong, they are haggling with them to know the lowest price at which they will sell their nuisance. Could not something be done upon this point, which should carry the name of Ireland into the far-off divisions of the globe, and give her one more link with the everywhere rising cause of man and of humanity?

PROGRAMME to the WESTMINSTER REVIEW for 1 July, 1833.

THE Whigs have done as little good as could be expected, and rather more of evil than could have been foreseen.

As every man counts one, the question with many a man at this moment is, whether he shall count it for the Whigs or for their rivals.

It is quite true that our *officers* have done anything but steer a course. They have set a sail forward, and backed another aft; and in everything exhibited the imbecility of people who are as much afraid of the success of their own side as of the enemy's. This is all very bad; but might there not be a worse? Is not the fact that we the poor *negros*, are all this time drifting towards our own coast of Guinea, and every day diminishes the chance, that though the other faction should get the lead, they will ever succeed in getting to sea at all? Would it be politic to help

to bring in the party, whose first operation on feeling settled, would be to put us all in irons below, and then carry sail like devils for Barbadoes? Would this mend our chance of escaping from the paws of the carcase-butchers in the end?

It is matter to reflect upon. There is many an important interest at this moment driving before the wind in the right direction, that would be brought to anchor in a moment if the Tories were masters of the deck. It is true, that their hour of distress would come; and perhaps some frivolous gain might be made, of what they would give in the way of grog to the crew to keep them in good humour. But it will be time enough for this when it comes of itself. In the meanwhile Tory principles and expectations are falling to leeward, as fast as ever the Whigs cannot hinder. The Tories see clearly, that their pear instead of ripening, is growing more rotten daily. The Radicals, such as they are, had more need try to get into some order for working the ship themselves, than help to bring back the ancient breed of buccaneers.

WESTMINSTER REVIEW, 1 July, 1833.

ART. I.—1. *An Attempt to show the Justice and Expediency of substituting an Income or Property Tax for the present Taxes, or a part of them; as affording the most equitable, the least injurious, and (under the modified procedure suggested therein,) the least obnoxious Mode of Taxation: also, the most fair, advantageous, and effectual Plans of reducing the National Debt.*—London. Hatchard. 1833. 8vo. pp.428.

2. *Observations occasioned by the Motion in the House of Commons, on the 26th of March, 1833, by Geo. R. Robinson, Esquire, for a Select Committee, "To consider and revise our existing taxation, with a view to the repeal of those burthens which press most heavily on productive industry, and the substitution of an equitable property tax in lieu thereof." Addressed to the Landed Proprietors of the United Kingdom.* By Richard Heathfield, Accountant. Author of "Elements of a Plan for the Liquidation of the Public Debt." —London. Longman. 1833. pp. 20.

IF there should alight some day from another sphere, a being intelligent but unacquainted with the ways of men,—a Martial or Mercurial Telemachus, voyaging for the future benefit of some planetary Ithaca,—he would be superhumanly amused and edified with the way in which the "earthies, of the earth," contrived to levy the contributions the sublunary tongue calls taxes. A few turns with his Mentor through the nearest custom-houses and manufactories, would convince him that

according to the constitutions of this world, an extra tax on any incorporation of use or pleasure whether of foreign or domestic origin, had the effect of inducing the usé of some substitute instead,—with the loss in the first place to the users, of all the convenience in price or otherwise, which in the natural state of things would have led them to take the other, and with the loss in the second place to the makers of the thing displaced, of all the traffic and employment which would be transferred to their sorrow from themselves to some rival craftsmen. If, therefore, there was algebra in the traveller's father-land,—and who shall say there is not,—it would be as plain to him as anything in what men call Wood and Simson, that the result was *minus* 2*a* in the shape of losses to some, and *plus a* in the shape of gain to any body else,—leaving the total result of *minus a* as the *pretium artis* to the inventors. And on looking abroad through at least one country not the lowest in its own esteem for wise, he would discover that the entire system was of this mystery compact;—that the Whole Duty of Man as a tax-layer, was supposed to consist in effecting the greatest public loss and injury, which the combined efforts of each of the members of the society to secure their own share of the wrong should make it practicable to attain. He would see all orders of the race he had fallen among, engaged in full pursuit of this worthy object; and if he had come sooner by as many revolutions of his planet as would make some two of ours, he might have seen a government maintaining itself principally by holding out for sale the scraps and portions of this public injury, for the substantial currency of support and comfort in return.

If he asked whether the two-legged creatures who acted thus, carried the same principle into their other concerns;—whether the rule of the country encouraged the cultivation of food by stipulating that the raiser should try to destroy a double quantity in the hands of somebody else, or if every man that filled up a puddle was obliged to make two elsewhere;—he would find to his surprise that they did not; the wonder being that people who did it in one case should have sense to avoid it in the other, or having the last, should adhere to the primitive practice in the remainder. And much would be the interest among his region's learned, when he laid the fact before its newest Institute as proof that mental power was abstracted by the moon; and with many an unearthly shrug, and shaking of the head perhaps beneath their shoulders, would they compare it with the customs in their own limpid atmosphere, where doubtless taxes, if such there be, are levied either on what the payer has, or on consumption of all kinds by one single *ad*

valorem rate,—with as much certainty as burthens, if the climate affords what seems a horse, are attached to his back and shoulders in preference to his heels, his nostrils, or his gullet.

In this state however *we are;* and can no more cure it by taking thought, than change the position of our planet or alter the dimensions of the year. Man was born to folly, as the sparks fly upward;—to suffer by other's unwisdom or his own, and most of all by the joint-stock foolishness where each clubs his own in aid of the common mass. If resistance were attempted, great would be the army of the defenders; first and foremost, the tenth of the concerned who really gain upon the final dividend of wrong; next, eight-tenths out of the other nine, who have a clear conception of the little savoury bit of fraud they roll under their tongues, but none of the price which on a conclusive estimate they pay for it; and on the other side would appear the scanty band of brothers, the little church, who think a stolen pint not worth a quart;—who dream that governments were meant to secure the general interest by checking private wrong, and will do so when wise men get to the top of them. But till this last happens, it is not to be expected that governments should be zealous to abandon the position which they hold as Grand Carvers of the public mischief. There is considerable temptation in holding the key to every man's pocket, and in receiving the courtship of all who desire to insinuate themselves therein, with the homage the others are obliged to pay in turn. It would be a weak head that did not foresee fierce opposition to any radical amendment, —horrid debates, and Tiber frothing with sophisms small and great. It will be a *pièce de résistance,* whenever the time comes; where the toughness of the meat is only evidence of the necessity there is for getting through it, and for putting on the whole armour of hungry men determined not to starve for other men's satisfaction. When, therefore, the rich and the interested endeavour to keep things as they are, reply that all this only proves that they are well and you are not; and set it all down as reason why you should go on to your mark with that perseverance which either brings the mountain to the ministers or ministers to the mountain, and makes modern history one record of the conquests of the community's interest over the gloses of the wise and the bluster of the brave.

The real objection to a tax on Property or Income,—the operative source of the practical hostility to either,—is the conviction that it would remove the chances of dishonest gain from the existing modes. The outcry is like an outcry against the abolition of lotteries; consisting of the lamentations partly of the contractors who make an assured gain thereby, and partly

of the ignorant or feeble speculators who see in the fact of paying 200,000*l.* to divide 100,000*l.* an open source of profit to themselves. Every man calculates upon his luck; there is a pleasure in the possibility of gaining without desert, which overbalances greatly superior probabilities of loss; but it does not follow that a sane government, acting in behalf of a community the whole of whom at all events have not eaten of the insane root, is bound to act upon the motive. The thing really at stake in the question of a Property Tax, is an amount equal to what Blackwood puts upon his page as the aggregate of the interests concerned against free trade;—including the results of the Corn Laws, if not there before. No man supposes or believes, that a Property Tax will ever be permanently co-existent with other forms of taxation; like the serpent of the Jewish hierophant, it will end by devouring the rest. It is perhaps in some sense fortunate, that a property tax involves certain peculiar sources of unpleasantness, which as being equally felt on the most modified application of it as on the most universal, will always end in a demand that it shall be co-existent with none else. Let once a property tax introduce its toe or little finger, and all the jobber taxes must move off the scene with as much velocity as is consistent with moderate warning to the dishonest interests involved. Men will never pay a property tax in part, and be plagued with excise and customs and imposts upon everything by which it is possible for individuals to make gain by the plunder of the community, for the remainder. They will as soon go to the trouble and expense of juries and judges of assize, and bargain that these shall extend only to alternate hundreds, while the rest shall lie open in *quincunx* order, for perpetuation of the needful crop of felonies throughout the land. The opponents of a Property Tax know they are fighting for a great stake; and the other side know it too. It may be not yet; but it will be. All that is to be done now, is for the people to put it into the things that are to be; and as surely as chopping fells the tree, the time will come.

The arguments against a property tax, as collected from one of the publications at the head of the Article, and attributed to men in the situation of whiggish ministers, are

'That a commutation of taxes would be attended with much partial inconvenience.'

'That consumption would not increase, as a consequence, because the incomes of the opulent classes would be reduced in such manner as to leave consumption, as to those classes, unaltered.'

'That by taxing the opulent, the employment of the poor would be less.'

'That a property-tax would drive property from the country, and must be considered, exclusively, as a war tax;—and—'

'That the graduation of such a tax upon an ascending scale, would tend to and terminate in the equalization of all property.'—*Observations &c.* p. 4.

The fragment in the way of a tail, attributed to Mr. Poulett Thomson, may be omitted as only the repetition of portions of the rest.

The first, or "that commutation will be attended with inconvenience," is like announcing that to quit an inn where there are fleas, will be attended with the trouble of going across the street. The fact will be admitted on all hands; but what the majority of inquirers will desire to know, will be what was the total magnitude of the insect persecution to be escaped from, what the precise importance of the effort to be incurred, and which way and what the final balance of the whole. Nobody ever wanted to change the mode of taxation in pure *gaieté de cœur;* the statement was, that men paid the necessary taxes two or three times over, and thought it worth while to go to some trouble to save the difference.

Next, that "consumption would not increase;" the *quare*, "because the incomes of the opulent classes would be reduced in such manner as to leave consumption, as to those classes, unaltered." This is the argument which tells the community "consumption would not increase" by putting down highway robberies on Hounslow. Who cares whether it does or not? the petition to the wisdom of the ministry, was that they would take measures for causing the consumption to be for the benefit of the right man. The complaint of the people is, that the honourable classes cheat, to millions of times the amount they cause the vulgar classes to hang for; and the answer attributed to government is, that what is stolen is "consumed;"—that as sure as the Sixteen-string Jack of the higher orders lays his hands on a purse he spends it;—and that for what they so receive, the herd are to pray to be made thankful. This is the trick negative; the trick positive comes next.

"That by taxing the opulent, the employment of the poor would be less," is the vulgar fraud of telling the ignorant they are interested in the dishonest expenditure of the rich. As if it was not before every man's eyes, that the expenditure and employment must be of the same amount, if the money was left in the hands of the right owners. Why are men to be put down for talking nonsense in Cold-Bath Fields, if ministers utter such *bassesses* as these? A most thinking people are to be told, that their interest is in paying the taxes for the rich, that the rich may spend the difference;—that their well-being depends on getting their share of what has passed through

the bowels of the wealthy, as Portuguese mendicants fight at the door of a convent for their portion of soup meagre. This is what is found charged on the Whigs, as their political economy in the middle of the nineteenth century.

"That a property tax would drive capital from the country," amounts to the assertion that it is for the interest of the community at large to retain in the country that portion of capital *which must be coaxed to stay there by paying the taxes for the owners.* This is evidently another edition of the "Sixteen-string-Jack" delusion. "Pay the taxes for the rich, and see how you will be benefited by their vouchsafing to spend their money among you" Whether there may or may not be a portion of capital, which would remove if forced to pay a fair share of the taxes, is of small importance so long as there are people to fill up the place. Fancy a shopkeeper in one of the great streets of the metropolis, threatening his brethren of the street that unless they promised to pay his parish rates for him, there should be one grocer less in the row. Imagine a man bullying upon this point; and think how the parish would laugh, at an argument thought so fitting for the atmosphere of the House of Commons. Are there not twenty aspiring young grocers in the Ward, whose hereditary capital is dwindling away for want of the good-will of a shop to put it in? What a lout it would be, that should bring forward a proposition for such payment at a vestry meeting.

But the thing may be viewed on another side yet. *Is there any chance for such openings for capital being made at all?* The proposition is, that paying twenty per cent in the aggregate instead of forty, is to drive away capital;—that getting rid of a system which causes two, if not two dozen, talents to be thrown into the sea for every one that finds its way into the legitimate expenditure of the public purse, is to cause wealth to flock abroad to escape the consummation. There might be capital which fled to the continent on the establishment of the Horse Patrole; but it is presumable that something more than the mere fact is necessary to prove the removal of the capital or capitalists an evil.

The last and grossest fallacy of all, is the one which declares that the graduation of such a tax would be "the equalization of all property." Look on and see how hard the rich will die, when they are brought to the post to make them do justice to the poor. What particular meaning might be in the minds of the propounders of this proposition, is not easily determined. If they meant that to tax a man of 1000*l.* a year one-tenth, of 2000*l.* two-tenths, of 3000*l.* three-tenths and so, would leave a man of 10,000*l.* a-year nothing at all,—they stooped to the

meanness of trying to deceive the imperfectly informed by affecting to reply to a proposal they knew nobody had ever dreamed of making. And if they meant anything else, they ran in the face not only of visible justice, but of acknowledged and experimental principle. In the worst taxes ventured on in civilized countries, recognitions may be discovered of the principle that taxes are to be laid, not upon what a man has, but what he has to spare; else why the agreement to tax what are called luxuries, in preference to the necessaries of life? When Mr. Pitt taxed windows above seven, no man discovered that this was confiscation; nor any curator of the public welfare threatened that the Dukes of Northumberland and Bedford would be found splitting their family mansions into domiciles with six windows each, or that properties would be subdivided to assume the appearance of a voluntary poverty set forth in the exclusion of the light of heaven. This caution was for the Whigs. The Edinburgh Review trembles at the idea of men who have not the blessing of being poor to their hands, counterfeiting poverty, and riding dog-horses that the public may say "There goes a miserable devil it would be vain to think of assessing to the property-tax." As if the desire of men, in the first place to be well carried, and in the next to be gallant and trim in the eyes of their neighbours and their neighbours' wives and daughters, was not nature's sufficient bulwark against any defalcation in the public welfare from such a source.

The simple principle of a graduated scale of taxation, is that he who has little can with less propriety be asked to live upon nine-tenths of it, than he who has much. At the same time let it be diligently kept in mind, that all attempt to argue the case as if any extreme or violent principle had been urged on the acceptance of the government, is premeditated fraud. The strongest proposals that have taken a tangible form, were in truth scarcely sensibly removed from the limit indicated by the comparative unprofitableness of levying taxes on the lower incomes. Take, for example, the Westminster Review of nine years ago, when it was the organ of at least as high-flying radicals as is possible since, and was checked by no consideration or likelihood of immediate applicability;—and what was the raving of the wildest of its imaginations? Truly that a man of a hundred and fifty pounds a-year should be exempted from taxation, and other incomes pay at a fixed rate upon the excess above 150*l.* This was the confiscation which was running in the heads of the Radicals, and against which the Whigs were born to protest*.

* Westminster Review for Jan. 1824. Art. *Instrument of Exchange.* (See Appendix in Vol. III of the present Work.

The questions of a Property Tax or Income Tax have been here put throughout without distinction, because they really appear to be in the main only modifications of the same principle, and as such susceptible of debate and comparison after the principle is acknowledged. Some men's income is from their property, and some men's property is in their income. A strong *primâ facie* impression may be indulged in, that, tricks apart, the difference between them is very much like haggling whether a man shall pay a half per cent annually upon the hundred pounds which is his principal, or ten per cent upon the five pounds which is his interest. The plea set up against taxing temporary incomes, would, if there was the proper graduation in the scale with reference to total value, be either a mistake or a quibble; and as the objection has the appearance of being on the popular side, it is the business of a popular work to disavow it. That the annual income of a land proprietor ought to be subjected to a higher rate of taxation than the same annual income from temporary industry, as, to take the favourite example, the income of a surgeon,—may be matter of demonstration; but solely upon the ground that *the smaller total value ought not to be charged the same absolute per-centage as the great.* If the landed proprietor and his successors are seized of 1000*l.* a-year for ever, and the surgeon and his successors for at the utmost fifteen years,—it is nevertheless true that the one is charged for ever, and the other only for fifteen years, which if a uniform rate was just, would be as it ought to be. But one possesses a property intrinsically worth, it may be, 20,000*l.*, and the other 10 or 11,000*l.*; and the value of their total payments should not be in the same proportion, but at an increased rate for the larger property. The injustice is in submitting two properties of different total values to the same rate of taxation generally; but the injustice is *there*, and not in the fact that the smaller property has not the due allowance for time on the supposition that a uniform rate is fair. The opponents of a graduated scale, therefore, advance the very fact which goes against their own case. It may be true enough that the surgeon ought not to be charged at the same rate as the land proprietor; but it is simply because it is universally unjust that the small property should be charged the same per-centage as the great,—which is the very point the propounders of the objection have undertaken to deny. They can see that the uniform rate is unfair where the inferiority of value arises from time; but they cannot see that the unfairness is the same, when it arises from any other cause.

The two points principally played upon in support of the existing system, are that men have an unconquerable aversion to making direct payments to the tax-gatherer, and that the

popularity of a Property or Income tax is founded on the expectation of throwing the burthens of the state on the rich. The first of these, when stripped of its feathers, is reducible to the fact that *cæteris paribus* men had rather pay a tax without knowing it than with. But it does not follow that men had rather pay forty pounds without knowing it, than twenty with; still less that the difference may be carried to any imaginable extent. The general feeling is, that taxes are a mystery and a kind of congenite evil, which it is for a man's happiness to try to know and think as little about as possible, as he would do with a scrofulous tendency in his family. But once make him comprehend that there is balm in Gilead, and that he may reduce the evil by a half or two-thirds by looking it boldly in the face,—and what was apathy before will be changed into eagerness, and not a word more be heard of the unconquerable aversion to submit to any direct curation of the mischief. The second point thrown out is a mere false light. There is no evidence that the idea of throwing the burthens on the rich, either is or has been any large ingredient in the desire for a tax of the nature proposed. That to a certain extent it should have entered, is the natural consequence of the zeal and ability the rich have shown to take care of themselves, and the unflinching cruelty with which large classes of them live, and will persist in living till driven from it by bodily fear, on the life's blood of the industrious classes. But the great, splendid, and rational object, has been and is, the desire of putting an end to the system of taxation, which has held up the public loss for sale, to anybody who would pay half the value and the remainder in corrupt support to general misgovernment. It is with this conviction the industrious portions of the community ought to imbue themselves; cherishing always a lively faith that the non-industrious are their born enemies, and will stick at no fraud, violence, or misrepresentation, that shall hold forth a probability of continuing their wrongs.

WESTMINSTER REVIEW; 1 July, 1833.

ART. X.—*The First Principles of Mechanics, with Historical and Practical Illustrations.* By William Whewell, M.A. Fellow and Tutor of Trinity College. Author of "An Elementary Treatise on Mechanics" and "A Treatise on Dynamics."—Deighton; Cambridge. Whittaker & Co.; London. 1832. 8vo. pp. 118. With plates.

THE most striking characteristic of the fluxion of eternity which forms the actual present, is the intense desire for sound reason in all things,—in fact for Radicalism,—which without limitation of subjects or in spite of limitation, penetrates everywhere like the fine dust of the tropics which nothing

short of hermetically sealing can exclude. Men long went on under an intense desire to know facts; a desire as natural as that of the famished mariner to be acquainted with biscuits, before deeply interesting himself in either the chymistry or the phytology of their production. But when this was partly satiated, they turned with fresh vigour to chew over again the root end of the liquorice-plant of knowledge, and delight themselves with the sweets which in the hurry of their eagerness had been left unexpressed among its fibres. It was highly useful that porters should carry their loads aright, and sailors hoist-in beer and water with a full knowledge of the powers of their tackle; but it was also very meet and fitting that philosophers should have the most perfect apprehension of the *rationale* of all these proceedings, even though it ended in no striking alteration in the existing practices, and no confutation of the rules of thumb already in operation among mankind.

And here the principal point wanted, is to have a clear settlement and understanding once for all, of what it is the mathematician wants, and wherein he differs from a collector of facts and authenticator of the testimony of the various John Nokes and Mary Styles who might be procured to give their signatures in evidence. The best instance in illustration, is probably the celebrated one of the Keplerian and Newtonian discoveries. Kepler, as is well known, being an individual peculiarly furnished with the bump of hunting for analogies, turned out from painful comparison of the contents of astronomical tables, the very complex and remarkable fact that the respective times of revolution of the different planets and their distances from the sun, bear such a relation to one another, that the squares of the times of revolution of any two planets are to one another as the cubes of the distances. And Newton, by a curious coincidence, came forward at the same time with his discovery derived from laying thing and thing together (which is what the learned call *synthesis*), that on the supposition that the force by which bodies in the mundane system were found to be impelled towards each other as in the vulgar instance of a stone falling towards the earth, should universally vary inversely as the square of the distance from the body towards which the impulsion takes place, the precise relation stated by Kepler between the times and distances of bodies revolving round a centre towards which they are impelled, would be the consequence. There are few who cannot see the distinctness of these two discoveries, and their perfect independence of each other. Kepler's theorem might have been true for ever, and the knowledge of it disseminated to the greatest imaginable extent,

without of itself throwing any further light upon the cause. And this would have been equally true, if instead of being on an abstruse subject and one which few except astronomers think of troubling themselves with, it had been ever so intimately connected with the common affairs of life. If from the moment that the schoolboy was buttoned into his trowsers till the time of his being stripped for bed, all nature had with one voice called out to him that the squares of the periodic times were as the cubes of the distances;—if it had been a thing he could not eat without, drink without, breathe without knowing and feeling that by it he moved and had his being;—this would not in reality have one jot reduced the value of Newton's demonstration, though there would have been no want of persons to express their wonder at any man's taking trouble to demonstrate a thing so palpably "self-evident." Their defect lies in the inability to distinguish, between seeing what none when it is shown them can fail to see, and rendering a reason. The *thing* may be as evident as "self-evidence" or anything else can make it; but the *reason of the thing* is not therefore the more evident, but in some sort the less, in consequence of the perpetual difficulty men feel in distinguishing between palpably constant effects and their causes.

An object, then, to be striven after by philosophical mathematicians, is to tighten the distinctions between the different sources or origins of belief, on the strength of which propositions are presented to be received. The two grand divisions appear to be, into inferences from experiment, and inferences from demonstration. For though at first sight it might appear as if the last-named class must be entirely resolvable into the former,—and though it may perhaps be proveable that no inference from demonstration can be totally and absolutely stripped of some portion of reliance on experiment for its basis,—yet this portion may in some instances be made to bear so minute a proportion to the whole, that its comparative non-entity may be taken as the characteristic of a distinct class, and in the vast number of mixed cases which arise, separation may usefully be made of the parts which respectively depend on the two sources, in the same manner as if the non-entity in one class was absolute. Simple geometry, is the instance in which the references to experiment, it is apprehended, may or ought to be reduced to something hardly distinguishable from non-entity. That we exist,—that we possess the faculties of sight and touch,—that things tangible have extension in some or all of the relations of length, breadth, and thickness,—that some of the objects of touch have their particles with difficulty moved among themselves or are what is called hard,—and that all or any of these

objects are capable of being moved if no extraneous obstacle interferes,—may perhaps in one sense be producible as what are necessarily inferences from *experiment*. But it is in a very different sense from that which would be conveyed, by the man who should rise up and say he knew by *experiment* that in all isosceles triangles the angles at the base are equal to one another; and in this sense it is, that simple geometry, if it were rid of the evident *maculæ* which are seen adhering to its surface, might be declared with strictness to be independent of experiment. Algebra, which is arithmetic, might subsequently be placed in the same class; for it need have no references but to the early conclusions of geometry, limitable in fact to the conclusion that things equal to the same are equal to one another, and its immediate corollaries. In the higher branches of mathematics, which are the application of geometry and arithmetic to physical phænomena, a greater or less degree of combination of the two sources of evidence necessarily takes place; and one of the improvements which may be suggested as lying open to the active mathematicians of the present day, is the establishing a more constant and practical distinction between what is derived from one and from the other.

The way to distinguish is to use terms; and the way to distinguish well, is to find out the terms that are best. *Axiom* is a word in bad odour, as having been used to signify a lazy sort of *petitio principii* introduced to save the trouble of inquiry into cause; and besides, it signifies nothing, but *worthiness* of all possible descriptions. *A Physical Law inferred from experiment*, or if it were permitted to put the whole into one term fabricated from the Greek, a "*Peirasm*," would appear to describe with precision all such propositions as that "equal forces acting perpendicularly at the extremities of equal arms of a lever to turn it opposite ways, will keep each other in equilibrium;" and that "if one of the forces be greater, the arms remaining equal,—or if one of them act at a longer arm, the forces being equal,—the greater force or longer arm preponderates." At the same time it is desirable to confine the term to cases which do not admit of being followed by any "For;" the appearance of that conjunction intimating that there is something which might have been transported into the class of demonstration.

The Aristotelian distinction of motion into *natural* and *unnatural* (see page 8), of which the first kind was permanent but the second had always a tendency to cease, is a fine specimen of the fallacies of those simple young people the ancients. Presented as a reason, it amounted to saying that certain motions were perpetual because they were found to be perpetual, and

others were temporary because they were found to cease. Or to give it the most favourable construction, it might be considered as an observation of the fact, that man cannot artificially impress on any substance a motion which shall be permanent.

The Section on "The First Law of Motion*" suggests a remark on the rather obsolete subject of "a perpetual motion." It may be assumed that the mechanical instruction of the age is sufficient to put an end to all pursuits after a perpetual motion, that are dependent on ignorance of the principle that action and reaction are equal. But there is no demonstrable impossibility in the discovery of a perpetual motion, arising from the application of some agency constantly renewed by the act of nature. The nearest approach to this existing, is probably the case alluded to of a water-mill where the powers of nature continually carry the fluid back to the regions from which it descended. If magnetic attraction had been of such a nature as to be intercepted like light by the interposition of a screen, it would have been easy to construct a perpetual motion; and that it is not so intercepted, is unconnected with ordinary mechanical principles. It therefore does not seem to be past possibility, that a natural agency should be discovered capable of producing a perpetual motion; though it may be freely conceded that none such is at present known. On the contrary it may be held very probable, that a perpetual whirligig is among the toys destined for the amusement of posterity.

In p. 13 there is importance in the degree of illustration given to the fact, that as it was erroneous to believe that a body in motion had of itself a tendency to resume a state of rest, so it was an equal error to believe that a body at rest had a certain definite tendency to remain at rest, and would not be put in motion *at all* unless this tendency was overcome. The ancients manifestly believed that a certain definite force was necessary to move a heavy body at perfect liberty, *at all;* and they seem to have taken for granted that the force required depended on the weight. The evidence of this is in the enunciation of the problem preserved by Pappus, "Having given the force which can move a given weight along a horizontal plane, to find the force which can move the same weight along a given inclined plane." In which the mistake is in supposing that on the horizontal plane, if friction could be removed, the smallest force would not be sufficient to put the heaviest body in motion. The

* '*A body in motion will go on moving uniformly in a straight line, except so far as its motion is affected by the forces which act upon it.*'—First Law of Motion, p. 10.

motion may be *slow*, and it may be a long time before it can be caused to accumulate or increase to a given amount. But there is no such thing as resistance to motion *in toto;* as may be proved by putting the heavy body in a situation where the resistances from foreign causes shall as nearly as possible be annihilated, as for example suspending it by a long cord.

In the speculations concerning Forces on a Lever (p. 19) fresh specimens are introduced of the simplicity of infant antiquity. Aristotle is produced saying, that the reason why the power moves the weight more easily in proportion as it is farther from the fulcrum, is "that the end which is farther from the centre describes a larger circle; so that the [smaller] body which moves the other, will be transferred through a larger space." A babe's reason, if ever such thing was; in fact a mere observation of a concomitance, and assigning it for a cause. And in another place he designs to be nearer to the mark by saying, that "the shorter end is moved *more against nature* than the other." This is the man dear to the dark ages, and to their offsets in the present.

Archimedes however, who wrote a little later, threw a most radical light upon the subject of the lever; and his demonstrations, with some alterations, abide to this day. It is interesting to see how rapidly the chubby boys of antiquity shot up in particular directions, while the soil was fresh and all nature before them for discovery. "Let us praise famous men, and our fathers that begat us;—such as found out musical tunes, and recited verses in writing*;" only let us not be persuaded to believe they had any monopoly of knowledge, or any patent for discovery except their being the first upon the ground.

In page 25, it has already been submitted that "*Peirasm*" or some equivalent term might be substituted for "Axiom," and that "For" should not be the sequence. But in the Corollaries, which are nothing but demonstrations in *petite tenue*, "For" is decorous and to be desired. In Corollary the first, the desirable conjunction duly appears; but in the second (which enounces that if a weight be supported on a rod resting on two fulcrums at equal distances from the weight, the pressures on the two fulcrums are equal), its services are wanted to introduce the reason, viz. that if the weight be considered as the fulcrum, the forces exerted at the two ends of the rod will by the preceding principle be equal. In Corollary the third (which enounces that if two equal weights be supported on a rod resting on two fulcrums at equal distances from the weights

* Ecclesiasticus, xliv, 1 and 5. *College Commemoration Service.*

respectively nearest and from the middle point between the weights, the pressures on the two fulcrums are equal), there would appear to be occasion for a further "Peirasm;" which is, that if given weights are in equilibrium on arms of given lengths, any other weights respectively equal to these will be in equilibrium on any other arms of the same respective lengths; a simple matter, but one not inferible except from experience, without admitting the vague and error-tempting principle of allowing things *to be* because there is no particular reason visible why they should not. But after laying this foundation, the matter of the third Corollary may be established like the second, by considering the two weights as fulcrums, and the two forces exerted at the middle point between them to break the rod, as contrary and equal.

The second and third "Axioms" so called, appear also to be purely and entirely matters of experiment. It would be very odd indeed if they should not be true; but there is no absolute theoretic necessity, or at least none produced, why they must inevitably be true. They would therefore be happily distinguished under some such term as has been proposed.

On these grounds or principles, the whole superstructure of the theory of levers may be founded by rigid demonstration.

In page 31, the two kinds of levers in which the power and weight are both on the same side of the fulcrum and only differ in the one or the other being nearest to it, should be melted into one. The terms *power* and *weight* are used to distinguish the force which it is intended to suppose active, from that which is supposed passive; but have no reference to the one being greater than the other. To introduce, therefore, a distinction of classes upon this latter ground, tends to obscure the common principle.

The operation of an oar, is a curious exemplification of the lever. The man would not have been worthy of intense punishment, who on the problem being presented to him without opportunity for experiment, should have declared the plan a fallacy like that of the child who pulls at the cart it is itself sitting in.

The *Wheel and Axle* is manifestly only a circular lever. All the properties of *Pullies* are also derivable from the properties of the lever, by considering the two radii of the "sheave" or wheel, which are drawn to the rope at its points of contact, as the arms of a lever. But the other way in which the properties of the pulley are capable of being demonstrated, points to the existence of a distinct mechanical power, which if there is no better name, might be called the "*Twitch*;" and of which it may be matter of curiosity to know, whether it is reducible to any of

the other mechanical powers or not. If a string be wrapped several times round a cylindrical body (or if preferred, round a bundle of some substances which it is desired to press together with great force), it is plain that if the included substances exerted an active force to burst into freedom, any one portion of the string would only sustain that fractional part of the effort, which is indicated by making the numerator unity or one, and the denominator the number of turns taken by the wrapping string. From which it follows that (after allowing for friction, which in this case, as in the wedge and the screw, is of great amount) the force exerted by the whole contrivance, is to the force applied to the string, as the number of turns taken round the body, is to unity.

The problem of the Inclined Plane "for a long course of centuries resisted the attempts of Mathematicians to solve it." The mistake of Pappus in the very enunciation of the problem, has been already mentioned.

'But, independently of this confusion in the enunciation of the problem, the principles by means of which Pappus attempts the solution are altogether fallacious. He supposes the weight to be formed into a sphere and placed on the inclined plane, and he considers the weight of this sphere as supported by a lever, the fulcrum being the point of contact of the sphere with the plane, and the power being applied at the extremity of the horizontal radius. No reasonable ground is or can be assigned for identifying the effects of such a lever with those of the inclined plane for which it is thus substituted.'—*p.* 42.

The *non causa pro causâ* appears to have been the great besetment of antiquity; and the moderns in the main have only improved when it suited their purpose. With the exception of a rising school of which Mr. Whewell may be considered as the leader, there is very little genuine antipathy to a fallacy of this kind, so long as men will receive it smoothly and no public outcry attends the attempts to force it down.

Cardan and Guidubaldi è Marchionibus Montis (which being interpreted is Marchmont), severally got no further than observing that the force required to maintain an equilibrium on an inclined plane, was greater when the angle of the wedge was more obtuse.

The history of the solution of this important problem will be given at large; as being a fragment of the history of science, interesting and little known.

'The person who first solved the problem of oblique forces, on principles which subsequent reasonings have confirmed, appears to have been Simon Stevin of Bruges, whose works were published soon

after 1600. This mathematician not only deduced correctly the proportion of the power to the weight on the inclined plane, but, by means of the propositions which he thus established, resolved forces so as to obtain their effect in different directions, and solved a great number of the most important problems relating to the oblique action of forces. We shall explain briefly his mode of treating the subject.'

'It has been recently stated (*Drinkwater's Life of Galileo, p.* 82.) that the problem of the inclined plane had been solved at an earlier period by Jordanus in the 13th century, and that the work in which this solution was given, was published by Tartalea in 1565. As however this solution, even if it be interpreted so as to be right in the result, was mixed up with many of the usual Aristotelian errors on such subjects, and was not connected, so far as we know, either by the author, the editor, or the readers of the work, with any consistent and tenable train of mechanical reasoning, we may still, it would seem, consider Stevin to be the father of Modern Statics, as we shall find Galileo to be the father of Dynamics.'

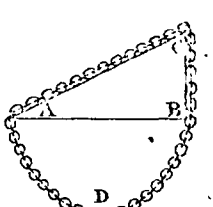
'After the Inclined Plane had been rightly reasoned upon by Stevin, various other authors also gave the solution of the same problem; and in a short time all questions connected with it were finally reduced to the general proposition of the resolution of forces.'

'We proceed to explain the reasonings of Stevin.'

'*Stevin's Proof of the Force on the Inclined Plane.*'

'PROP. *A weight resting on a perfectly smooth inclined plane, and supported by a string parallel to the plane, will be in equilibrium when the power is to the weight as the height of the plane is to its length.*'

'An inclined plane is a plane inclined to the horizon, as *AC;* and its height *CB* is limited by a horizontal line *AB.*'



'Let there be a uniform chain or cord returning into itself, as *ACBD,* and let this pass round the plane *ACB,* and hang down below in the festoon *ADB.* This chain will remain at rest by its own weight. In the position of rest, the two sides of the festoon *ADB,* (the ends being in the same horizontal line) will be exactly similar, and will exert equal tensions at *A* and *B.* Hence if the part *ADB* be removed, the remaining part *ACB* will still continue at rest. But the weights of the portions of the chain *AC* and *BC* are as *AC* and *BC.* Hence the weight which rests on the inclined plane is to the weight which supports it as *AC* to *BC.*'

'Thus if the angle *CAB* be one third of a right angle (30°) *BC* is the half of *AC,* and a force acting parallel to such a plane will sustain a weight double of itself resting on the plane.'

'In the same manner if we have two inclined planes of which the

height is common to the two, it may be shewn that the weights which rest upon them, and balance each other by means of strings parallel to the planes, are as the lengths of the planes.'—*p.* 43.

'In writing of the history of the modern theory of Mechanics, it was impossible not to profit by Mr. Drinkwater's "Life of Galileo." I gladly acknowledge great obligations to this excellent specimen of scientific biography. On one point however, I have ventured to express dissent from the author of that work. I am not able to find, in the propositions concerning the equilibrium of weights on inclined planes, which he quotes from Tartalea's Edition of Jordanus, any good ground for deposing Stevin from the dignity of having been the first to give a proof of the statical property of the inclined plane.'

'Jordanus's proof confessedly assumes that it requires the same force to raise a body up any vertical height as to raise a body smaller in any proportion up a vertical height greater in the same proportion, *the bodies being supported on inclined planes*. Such a proposition, if asserted in 1300, or even in 1564, must have been, I conceive, a mere guess; since it was not obviously connected with any self-evident principle or known truth. It was probably one of many conjectures, and till better reason was shewn, had no claim to attention, above the solution of the problem of the inclined plane recorded by Pappus. To speak of the "principle of virtual velocities" as assumed in this solution, is attributing to the author a detection of analogies of which it is highly unlikely that he had any apprehension; and a generalisation which was not thought of till long afterwards.'

'Stevin's proof, on the other hand, does really refer the proposition to an axiom so clear as to compel conviction, though not the most simple which may be used. The impossibility of a loop of chain running perpetually over an inclined plane by its own weight, may be referred by *us*, if we chuse, to the "principle of virtual velocities;" but it was undoubtedly clear to the readers of Stevin on far less general views. The deducing the doctrine of oblique forces from this, as an axiom, was an important step in Mechanics. It adds to the merit of Stevin, that having been the person to make this step, he was fully aware of its use and importance. It applies in a very great variety of cases of the properties of forces which he thus established; and in some of his works the inclined plane with the chain hanging round it, is employed as a vignette; accompanied with the motto "*Wonder en is gheen wonder*."'

'I may add that Stevin's discovery of this proof is of an earlier date than I have stated in the following pages, if it be contained in the "*Beghinselen der Waaghconst*" published in 1586, which I believe it is, though never having seen the book, I cannot speak with certainty.'

'On these grounds I still consider Stevin as the first person who rightly solved the problem of forces acting obliquely, and consequently as the founder of the science of Statics. And I have no doubt that in this character he would have obtained far more celebrity than has fallen to his lot, if the speculations of Galileo had been given to the world half a century later than they were; and if, by this

means, the science of Statics had been left to unfold itself upon its own proper principles, as in the reasonings of Stevin it had begun to do, and as it would have done if it had not become mixed with the mechanical doctrines of motion. But before the works of the Flemish engineer could produce much effect upon the mathematicians of Europe, the minds of physical philosophers were all turned towards Italy, where Galileo and his disciples were putting forth their doctrines concerning motion; a subject of much more varied and extensive bearings than the doctrine of equilibrium, and rendered peculiarly interesting by its connexion with the great question then agitated, of the truth or falsehood of the Copernican system. And the principle of virtual velocities, though in reality it was established as a general principle by being proved in each particular case, tended still further to throw into the shade these statical investigations, by making the doctrine of equilibrium appear to depend upon the doctrine of motion.'—*Preface, p.* vi.

The early speculations on the nature of Accelerating Force were in the same strain of feebleness with those on the Laws of Motion in general.

'When men began to speculate concerning the motions of bodies which fall from a considerable height, they soon observed these two facts; *first*, that a body went on moving quicker and quicker the further it fell; *second*, that heavy bodies fell more quickly than very light ones.'

'The first rude guesses which were made to explain these facts and to assign their laws, were, as might have been expected, erroneous. It was held by Aristotle that heavy bodies are accelerated by the air which rushes in behind them to fill up the void their progress leaves; and that large bodies fall faster than small ones in proportion to their weight.'—*p.* 69.

It is not clear that something like this notion of Aristotle's does not hang by some people to this day. There is a theory touching the motion of ships and vessels being accelerated or otherwise affected, by the water which rushes in behind them to fill up the void, which seems to be the same thing in a state of transposition.

'The slightest attempts to verify these laws by experiment and by tracing them to their consequences, would have shewn them to be false. But unfortunately in the times succeeding those in which these doctrines were promulgated the exact sciences were studied only as sciences of deduction. It was supposed that the first axioms of natural philosophy were to be discovered by their own internal evidence; experiment was not appealed to, to suggest or verify them; principles once asserted by eminent men were thenceforth accepted without dispute; and the business of other speculators was to deduce the consequences of such principles according to the rules of logic.'

'This continued to be the case for nearly two thousand years. Galileo was the first person who drew the attention of the world to the necessity of examining, by comparison with facts, the truth of the asserted laws of motion.'

'It was easily shewn by experiment that the second of the above laws was false. Balls of 100 lbs. and 1 lb. were let fall from the famous leaning tower of Pisa; and instead of falling in the same time through spaces which were as 100 to 1, it appeared that the larger anticipated the smaller in its descent to the ground by two inches only. This small difference may justly be attributed to the resistance of the air, which produces a somewhat greater effect on the lighter [smaller] body. And by similar experiments it was shewn that bodies of all magnitudes fall towards the earth with equal velocities, except so far as they are affected by such causes of irregularity.'—*p.* 69.

The speculations which led to the establishment of the Second Law of Motion *, appear to have been entered into with more caution by their early followers, and more consciousness of the possibility of being wrong.

'A stone thrown from the hand describes a curved path and soon comes to the ground. The laws of such motion presented an obvious subject of speculation. Aristotle asks † "Why does the motion cease of things cast into the air? Does this happen when the force has ceased which sent them forth? or is there an opposite force which acts against the motion? or does the fact result from the disposition to fall, and occur when this disposition is stronger than the projectile force? or is it absurd to put the question in this manner, instead of referring to the general laws of motion?"

'The last clause is perhaps freely translated, but, as we have given it, it suggests the true reply to the preceding questions.'

'No true explanation was given of the facts which suggested these questions till a much later period. A mistaken belief concerning the nature of the motion of *projectiles*, or bodies projected, contributed for some time to mislead enquirers on this subject. In the use of "*military* projectiles," it was prescribed as a rule that, for certain distances a gun must be directed "point blank;" that is, with its barrel in a horizontal straight line towards the point aimed at; but that for greater distances the barrel must be elevated, so as to make allowance for the fall of the bullet, which was called shooting "at random." This led to the opinion that the path of a bullet discharged from a gun was a horizontal straight line till it reached a certain distance, and that after that distance it began to descend in a curved line.'

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* '*When any force acts upon a body in motion, the change of motion which it produces is in the direction and proportional to the magnitude of the force which acts.*' —Second Law of Motion, p. 84.

† Μηχ. προβ. λγ.

'Thomas Digges, in his Treatise on the New Science of Great Artillerie (1591), remarked that the bullet has, even from the beginning, a downward motion which though insensible at first, draws it from its direct course.'

'Tartalea also denied that a bullet ever moves in a horizontal line; but his theory was still very erroneous; for he supposed that the bullet's path through the air is made up of an ascending and a descending straight line, connected in the middle by a circular arc.'

'In 1609, Galileo had considered the subject, and had satisfied himself that the motion of projectiles in a vertical direction, is not affected by their motion in a horizontal direction. This principle, combined with his theory of falling bodies, led him to the true doctrine of projectiles.'

'Galileo's principle, having been once suggested, was supported by many circumstances in the motion of bodies projected, and was especially confirmed by the discussions which took place about that period concerning the motion of the Earth.'—*p.* 80.

The "*military* projectors" contrived to add a new entanglement to the question, by mistaking the consequences of looking along a line of sight not parallel to the axis of their gun but intersecting it at the distance of a few feet from the muzzle, for what they were pleased to call "the rising of the ball." Thirty years ago, it was rare to find a naval or military man who had any consciousness of the mistake, or of the useless and ridiculous complication it introduced into the mystery of gunnery. The most blundering recruit has a sort of instinctive perception, that to hit an object at a distance, he must raise his aim in proportion to the distance, as was his wont in throwing stones; but all his ideas are scattered, when he is presented with a piece whose line of sight is made to converge towards the axis, and told he must believe that the ball rises for certain specified distances.

When the presumed Laws of Motion were applied to the phænomena of Astronomy, their points of strength and weakness were necessarily brought to the test.

'The doctrine promulgated in modern times by Copernicus, that the Earth travels round the Sun, and revolves on her own axis, led to a long series of controversies, which turned mainly upon the truth or falsehood of the supposed laws of motion, and especially of the one now under our consideration. The opponents of the Earth's motion attacked that doctrine with objections drawn from erroneous mechanical principles; but the assertors of the Copernican system, being at first ignorant of the true principles which bear upon the subject, were not fortunate in their answers to the objections.'

'If the Earth, it was said, revolved so rapidly from west to east,

a perpetual wind would set in from east to west, more violent than what blows in the greatest hurricanes; a stone, thrown westwards, would fly to a much greater distance than one thrown with the same force eastwards; as what moved in a direction, contrary to the motion of the Earth, would necessarily pass over a greater portion of its surface, than what, with the same velocity, moved along with it. A ball, it was said, dropt from the mast of a ship under sail, does not fall precisely at the foot of the mast, but behind it; and in the same manner, a stone dropt from a high tower would not, upon the supposition of the Earth's motion, fall precisely at the bottom of the tower, but west of it, the Earth being, in the mean time, carried away eastward from below it. It is amusing to observe, by what subtile and metaphysical evasions the followers of Copernicus endeavoured to elude this objection, which, before the doctrine of the Composition of Motion had been explained by Galileo, was altogether unanswerable. They allowed, that a ball dropt from the mast of a ship under sail would not fall at the foot of the mast, but behind it; because the ball, they said, was no part of the ship, and because the motion of the ship was natural neither to itself nor to the ball. But the stone was a part of the earth, and the diurnal and annual revolutions of the earth were natural to the whole, and to every part of it, and therefore to the stone. The stone, therefore, having naturally the same motion with the Earth, fell precisely at the bottom of the tower. But this answer could not satisfy the imagination, which still found it difficult to conceive how these motions could be natural to the Earth; or how a body, which had always presented itself to the senses as inert, ponderous, and averse to motion, should naturally be continually wheeling about both its own axis and the Sun, with such violent rapidity. It was, besides, argued by Tycho Brahe, upon the principles of the same philosophy, which had afforded both the objection and the answer, that even upon the supposition, that any such motion was natural to the whole body of the Earth, yet the stone, which was separated from it, could no longer be actuated by that motion. The limb, which is cut from an animal, loses those animal motions which were natural to the whole. The branch, which is cut off from the trunk, loses that vegetative motion which is natural to the whole tree. Even the metals, minerals, and stones, which are dug out from the bosom of the Earth, lose those motions which occasioned their production and increase, and which were natural to them in their original state. Though the diurnal and annual motion of the Earth, therefore, had been natural to them while they were contained in its bosom; it could no longer be so when they were separated from it.'

'The objection to the system of Copernicus, which was drawn from the nature of motion, and that was most insisted on by Tycho Brahe, was at last fully answered by Galileo; not, however, till about thirty years after the death of Tycho, and about a hundred after that of Copernicus. It was then that Galileo, by explaining the nature of the composition of motion, by showing, both from reason and experience, that a ball dropt from the mast of a ship under sail would fall precisely at the foot of the mast, and by rendering this doctrine

from a great number of other instances, quite familiar to the imagination, took off, perhaps, the principal objection which had been made to this hypothesis.'

'The disciples of the school of Galileo went on confirming this view of the matter. Thus Gassendi, in his treatise "De motu impresso à motore translato" shews in a variety of ways, that a body which, while it is carried along in any vehicle, as a boat or a chariot, has another motion impressed upon it, by falling, or by being thrown, or in any other manner, retains still the motion of the vehicle. He thus refutes the objections which had been brought against the motion of the Earth by various persons, and especially by Mofinus, in a treatise entitled "*Alæ Terræ Fractæ.*"

'In this manner it was now seen that a stone falling from the top of a tower, ought not to be left behind by the motion of the Earth's surface from west to east, and thus to fall to the west, as had been asserted to be the consequence of the laws of nature. The stone would partake of the motion which the tower had, and would therefore, relatively to the tower, fall in a vertical straight line.'—*p.* 81.

But in all ages, the defenders of ancient errors, when beaten out of one assertion, have been found equally prepared to stand upon the contrary.

'After it had ceased to be a tenable argument against the rotatory motion of the Earth, that the stone did not fall to the *west* of the vertical, it was asserted that a real objection was to be found in the circumstance, that the stone did not fall to the *east* of the vertical. For the horizontal velocity, from west to east, which the stone has when it is let fall, and which it retains during its fall, is that which belongs to the *top* of the tower. But the top of the tower moves faster than the bottom by the rotatory motion of the Earth, being farther from the centre. Hence, the stone ought to move farther to the east in the time of its fall, than the bottom of the tower does; and thus ought to get the start of the tower, and fall to the eastward of its base.'

'The answer to this objection is, that the stone really does fall to the eastward of the foot of the vertical, but that in all experiments which we can make, the interval is too small to be certainly determined by experiment, as appears by calculating its magnitude. In some experiments made in Italy, it is said that such a deviation was really detected.'

'By experiments and controversies of this kind, the Copernican system was finally established as the true system of the universe.'—*p.* 83.

Of the answer to the last objection, it appears possible to question the accuracy after all. Is not the real answer, that in the calculation which ends in determining that the stone ought to fall to the eastward, the successive impulses of the accelerating force are assumed to take place in lines always parallel to the *first* position of the vertical in fixed space,

whereas they really act in straight lines successively inclined from such parallels by an increasing angle, viz. the angle described at the earth's centre by the motion of the tower in the time elapsed since the stone began to fall;—and that if this continual change of direction were taken rigidly into the account, it would bring the stone to the foot of the tower and no where else?

Among the effects of centrifugal force (in p. 92.) is enumerated the augmentation of the equatorial diameters of the earth and of the planets Jupiter and Saturn. As mere matter of speculation and by the bye,—is it not likely that the actual relation of the diameters has been the consequence of some great convulsion? And would not the convulsion most competent to produce the effect, be a change in the axis of rotation, and the outbreak of internal waters in consequence? If a planet was originally framed with its sea-water in the inside under a thin crust, and of such a form as would balance the effects of rotation about the actual axis, what pressure on the square inch would arise from changing the axis of rotation in different assigned degrees? For example, in our earth, under such circumstances, would not a change in the axis of rotation from the previously-existing poles to their equator, create a pressure at the previous poles, equal to the weight of a column of sea-water fourteen miles high, or 33046 avoirdupois pounds upon the square inch; while a change to any position short of the equator, would create some inferior pressure which might be calculated? A piece of hard free-stone of 24 inches long, five inches broad, and nine-tenths of an inch thick, laid flat-wise and propped at the two ends, broke in the middle with a weight of 127 lbs; from which it may be collected that to tear asunder masses of such stone would require a direct force of 753 lbs. per square inch. If two oblate spheroids of the dimensions of the earth be placed so that their axes bisect each other at right angles, their surfaces will intersect in what (neglecting the spheroidity) may be considered as two great circles cutting each other at right angles. If on the inner surface of one of the four *menisci* or oddly-shaped figures contained between the intersecting surfaces, successive circles be described about the point which is the extremity of the axis of one of the spheroids, the pressure of water on the surface included by one of these circles will vary at first as the square of its radius, as will also the weight of the shell itself of a given thickness, while the quantity of tenacious crust of a given thickness to be broken through in its circumference varies only as the radius. But afterwards the variation of the pressure of water will grow less rapid, by reason of the decreasing depths; and there will be

some circle or figure approaching to one, (from the mode in which the depth of water varies, apparently a kind of ellipse with its greatest diameter in the direction of the greatest dimension of the *meniscus*, and its periphery interior to the edges of the *meniscus* in all parts), where the pressure of water acting upwards, compared with the weight of the shell and the tenacity of its periphery, will be a maximum. If a circle were described about the point intimated, at the distance of the point of contact with the next *meniscus* or 45° of the earth's surface, its circumference would be 1121 millions of inches; the tenacity of this circumference of free-stone, for every inch in its thickness 844098 millions of lbs; the weight of the included shell (taking its specific gravity at double that of sea-water), for every inch of thickness 8730 billions of pounds; the whole resistance for every inch of thickness, about 8731 billions of lbs (being the sum of the two last); the pressure of sea-water on the included shell from below, 1720 trillions of lbs; which last number divided by the next preceding, gives 197,000 inches, or in round terms three miles and one-ninth, for the thickness of the crust of hard free-stone that would be broken through on such line, and probably a much greater thickness would be broken through on the line where the pressure on the included surface compared with the resistances opposed is a maximum. From which it appears likely to be deduced, that a body of internal water would be competent to *blow up* the exterior crust of the earth though made of solid free-stone, to a thickness sufficient to account for any of the known phænomena of geology that can be referred to such an origin. What physical accident can be imagined productive of such a change of axis, except the impact of some other planetary body? Would not an impact of this kind which should have removed one of the poles from any part of the circumference of the small circle described about London at the distance of 60°, to its present place, have been sufficient to account for a climate of palm-trees and crocodiles (the climate of Grand Cairo) in Pevensey Level, and for a "breaking-up of all the fountains of the great deep," sufficient to throw the strata of the crust of the olden world into any positions a geologist could desire? Will not the progress of geological science point out the situation of the inter-tropical belt of the olden world by the remains of tropical animals, and consequently the situation of the old poles; and has anybody laid the foundation of a *bone chart* with this view? Are there appearances of gibbosity in any of the planets, which might be referred to changes of form in the fluid parts while the solid ones, entirely or in part, continued as before? If a body was

formed spherical and at rest, and then *spun* till the internal waters broke out, would not these form an equatorial belt; and are there appearances referible to such a source on the surfaces of any of the planets? Finally, may not the moon be a world in its pristine state, waiting for the shock that shall give it the surface of a terraqueous globe? *

The following inference has not been popularly diffused.

'If the rotation of our Earth were seventeen times faster than it is, the bodies or matter at the equator would have centrifugal force equal to their gravity, and a little more velocity would cause them to fly off altogether, or to rise and form a ring round the Earth like that which surrounds Saturn.'—*p.* 92.

The speculations on the Third Law of Motion, notice the great effects of percussion (exemplified, for instance, in the driving of a nail), as distinguished from pressure; but finally omit the explanation. *Query*, where is the explanation to be found?

The enunciation of the Third Law of motion (p. 104), has not altogether the appearance of an improvement. That "*Action and reaction are equal, and in opposite directions*,"—though it may require a good deal of elucidation before all that it includes is understood, seems to be finally more efficacious and expressive than that "*When pressure communicates motion directly* (that is, in the direction of the pressure,) *the Moving Force is as the pressure*." But possibly there were reasons and objects which do not immediately meet the eye. The term "pressure" is manifestly introduced with a view to confine the word "force" to its sense in the phrases "moving force" and "accelerating force;" and intends what has usually been implied by a "uniform force." It may be a question whether it would not have been better to alter the word *force* in the phrases of "moving" and "accelerating force;" in which the meaning of "force" seems to be that of efficacy or operation in a particular direction or way, produced by the agency of a power which may also be acting in sundry other ways at the same time. The "force" would seem to be properly the single agent, as for instance gravity; while what have been called the "moving" and "accelerating forces" seem to be the operative powers of gravity in producing two different kinds of consequences.

* There may be major errors in these calculations or surmises; but there is enough to show that interesting results may possibly be obtained.

POSTSCRIPT.

ON reference to the King's Library at Paris, Stevin's solution of the problem of the Inclined Plane is found to be in the book, and under the date, surmised by Professor Whewell as quoted in page 450 of the present Article. The title of the work is *De Beghinselen der Weeghconst beschreven duer Simon Stevin van Brugghe. To Leyden, In de Druckerye van Christoffe Plantijn, Bij Francois van Raphelingen. CIↃ IↃ LXXXVI.* 'The Elements of the Weighing Art [Statics], written by Simon Stevin of Bruges. At Leyden, in the Printing Office of Christopher Plantijn, by Francis Van Raphelingen. 1586.'

The solution in question is in the pages 40-42; but instead of a single inclined plane with a base and perpendicular, there is presented a double inclined plane, such as would be made by adding to Professor Whewell's figure a second inclined plane of the same altitude and about half the base of the other, but with no perpendicular drawn or expressed between the two. The same representation is introduced as a vignette in the title-page, with the motto *Wonder en is gheen wonder*, 'A wonder and is no wonder.'

Two other books by the same author, entitled *De Weeghdart beschreven duer Simon Stevin van Brugghe* (The Weighing Art, written by Simon Stevin of Bruges), and *De Beghinselen der Waterwichts beschreven duer Simon Stevin van Brugghe* (The Elements of Hydrostatics, written by Simon Stevin of Bruges), contain each the same vignette and motto in the title-page; and are also in the King's Library at Paris.

Stevin or Stevinus is not unknown to British fame. "My uncle Toby" bought him in the second year after being wounded before Namur; and his being brought to mind by the appearance of Dr. Slop, was the cause of the dispute between the two brothers in which both behaved so characteristically. He has also been commemorated, as the first who wrote sensibly on the subject of keeping Public Accounts.

WESTMINSTER REVIEW, 1 July, 1833.

ART. XVI.—*An Essay on the History and Theory of Music, and on the Qualities, Capabilities, and Management of the Human Voice. Second Edition. Enlarged and considerably improved.* By I. Nathan.—Parts I. and II. 1832 and 1833. London; Morton and Co. New Bond Street.

MUSIC, which is the poetry of geometry, is on the march like everything else. The knowledge why musical effect is produced from sounds of one particular kind or relation and

not from others, which used to be confined to a small number of crabbed philosophers, principally decayed organists and heads of colleges, is spreading fast in what the phrase of the times denominates "the musical world," and is in a fair way of producing practical good fruits. Not that this contains all knowledge, or that music has been non-existent till now; this is only the sarcastic exaggeration with which all advancement is met by the patrons of "the extinguisher." But every extension of information has its crop of advantages in the end. It invariably finishes by clarifying something, sharpening something, increasing the powers of something. Though it should have the appearance of being at most but an improvement in the mechanism of the performer, it will find the means of re-acting upon the imagination of the composer. If Mercury's or Jubal's lyre had never got beyond the first shell of a tortoise and the random sounds of strings of nature's stretching, the musical composers would not have been far on their road at present; and by parity of reasoning, any fraction of improvement in the same track now, may be expected to be attended with its modicum of good. As an instance in point, it appears to be undeniable that the peculiar powers of the musical phænomenon of the present day, Paganini*,—who, after making all imaginable allowance for what it may be possible to class among brilliant difficulties, will leave his traces upon instrumental performance of all kinds *in secula seculorum*,—are to be referred to a highly augmented familiarity (whether acquired from theory, or from the instinctive practical tact attendant upon favourable natural organization, is of little immediate importance,) with those mysteries of the musical string which the learned, from the days of Pythagoras, have only darkly seen.

In nothing is the modern world more universally improved, than in the getting rid of nonsensical *non-sequiturs*. What a long time, for instance, it will be, before a modern musician is found making "the belly of his instrument curved to represent the heavens; the back level to represent the earth; with a dragon eight inches from the bridge, to represent the eight points of the winds; four inches of neck, to repre-

* A *set* has been made against this extraordinary performer, on the ground, among others, of his being *a foreigner*. He is consequently become part and parcel of the question of Free Trade. If foreigners excel on the violin and Englishmen on the spinning-jenny, let us encourage foreigners to play to us on the one and Englishmen on the other. The fact that the public had rather hear the music of the foreigner, and rather wear the broad-cloth or use the hard-ware of the Englishman, is proof that there are callings to which Englishmen are more strongly invited, both by the public interest and by their own, than to music. The point is defensible to extremity; and will make a good text some other time. Englishmen must pay double for their bread, and ought to do, till they can work these clap-traps of pseudo-patriotism out of their cerebral processes.

sent the four seasons of the year; five strings to represent the five planets and the five elements; and its total length fixed at seven feet two inches, *to represent the universality of things.*" Such, on the authority apparently of Père Amiot, was the ancient *kin* of the Chinese,—that sagacious people, whose domestic policy is still viewed with lurking affection by the friends of stable institutions at home. Yet even there, conservative principles have not been able to keep out change; for it appears that "the modern *kin* has seven strings," in consequence probably of discoveries among the planets, and that the universality of present things is represented by "about five feet five inches." (*An Essay* &c. ch. i. p. 3.)

The zeal against *non-sequiturs*, however, should not be extended to analogies of which the reason is only unknown. One of the most remarkable of these, is the analogy understood to exist between the divisions of the musical string, and the distances of the planets from the sun, as also with the divisions of the different coloured rays when dispersed by refraction; the first of which is manifestly the origin of the idea of the "harmony of the spheres." The writer would do good service, who would detail without affectation or mysticism, the exact degree in which these analogies exist or the contrary. If the analogy is certain, it points to the suspicion, in the cases of the arrangement of the planets and the particles of light, of a connexion with the successively greatest possible frequencies of coincidence in the effects of different sets of periodical impulses of some unknown kind.

Another point on which the moderns have improved, is in scouting the idea of a regulated "best;" though there are still symptoms of a school, particularly in France, who believe themselves to be on the verge of breaking out into the *beau idéal* in sculpture, painting, poetry, and politics,—from which, to setting up their idol and demanding that men confine themselves to worshipping it, the step is small. Plato it seems, says, that the Egyptians ruled "that nothing but beautiful forms and fine music should be permitted to enter into the assemblies of young people. Having *settled what those forms and that music should be,* they exhibited them in their temples; *nor was it allowable for painters, or other imitative artists, to innovate or invent any forms different from what were established.*" What the beautiful forms were, it is given the moderns to see;—not so bad as might be, and yet a world behind the innovating Greeks. And of the music, it is fair to suppose the same. The mania of orthodoxy has been hereditary from the first man. Adam and Eve had doubtless a right way of putting on a coat of skins,—and rated Cain, Abel, Seth, and their little nameless sisters, for innovations in the art of dress.

The ancients had an exalted opinion of the moral and political powers of music; and it is not impossible that when the direct communication of ideas was vastly more limited than since the diffusion of printing, the indirect method of music might possess greater power in consequence. A "Lilliburlero" directed against Nero could not well have been less efficacious, and might easily have been more, than against any sovereign of modern days. The politicians of antiquity seem consequently to have been wonderfully anxious to preserve in primitive simplicity their Dorian "Hundredth Psalm," and Phrygian "Grenadiers' March," and to confine to their proper places the Ionian "Begone Dull Care," and Lydian "All Good Lasses." The Chinese, who are the pinks of propriety in Church and State, also "have a specific number of airs for great occasions, which are never changed or varied, and as these airs are only appropriated to particular times and occasions, they are constantly recognized, felt, and understood. They have their court airs [as "God Save our great Fum Hi,"], airs to excite virtue [a kind of "Chinamen strike home,"], and airs to inspire true concord and national felicity" [being probably "Confucius's Boys," and "Croppies lie down."] The resemblance between the Chinese scale and the Scottish, remarked by Dr. Burney, appears traceable to the same source as the resemblance between a man with one leg in China and in Scotland. It proceeds simply from the omission or non-use of the Fourth and Seventh of the key. One consequence of which is, that Chinese or Scottish airs may be made *à discrétion* on the pianoforte, by the recipe of playing only on the black keys; every attempt at making an air out of those notes, appearing to glide into the Scoto-Chinese style, as the most agreeable to the ear the sounds given will admit of.

The Chinese must certainly have an Opera. In India-ships it is a common thing to set the Chinese seamen to perform upon the quarter-deck for the amusement of the passengers; and three of them have been heard to sustain the characters of a Mandarin and his wife and son quarrelling, in a way that could not have been surpassed by any Italian water-borne *buffi*.

The Hindoo instrumental music, is not without effect, and it is easy to imagine the possibility of a taste being acquired for it. It is monotonous and soothing,—like the tinkling of water and some other continuous sounds. The idea which it suggested to the writer of this on first hearing, was that it was like the effort of a musician to spin out a close *ad infinitum* by a perpetual evasion. Everything seemed to wind up into an air bearing some resemblance to the two first lines of "Say, little foolish fluttering thing;" but instead of concluding, it ran on

into a kind of interminable *coda*, mingled with snatches of fragments of the previous air. The principal instrument is a stringed one called *sitâr* (cithara); being a small violin, played with a bow in the posture of a violoncello, by a performer sitting on the ground. A performer on two kettle-drums of the size of a man's head, which he beats with the palms of his hands, appears to consider himself as guiding the whole and discharging the *obligato* part, and gives himself as many airs of direction as the leader at the Odéon.

The Joloffs on the coast of Africa (who are also among the writer's musical acquaintances) play on a kind of guitar of different sizes, manifestly intended for piccolo, tenor, and bass; formed of half a gourd covered with a piece of hide stretched over it wet, the neck consisting of a stick thrust through two holes in the gourd, and the strings fastened each to a separate ring of soft leather encircling the neck, which on being forced upwards retains its place by friction like the brace of a drum, being exactly what is found represented on the Egyptian monuments (See Wilkinson's Manners and Customs of the Ancient Egyptians, Vol. II, pp. 301, 302, 303 *); and one peculiarity of their tunes appears to be, that they *end* on a shake or trill. They have fixed airs, distinguished by names; one, for example, the performer called "The rousing of the Damel," doubtless the "*Veillons pour le salut de l' Empire*" of that portion of the universe. Bowdich's account of the white negro harper, whom he saw during his mission to Ashantee, (given in Ch. i. p. 39 of the *Essay*), is confirmation of music's having made no inconsiderable advance in the interior.

The Wahabees (with whom the writer has also had the advantage of a personal acquaintance) chant their prayers in a manner closely resembling some parts of the cathedral service. Whatever may be their theory, they have a practical acquaintance with the rudiments of counterpoint.

The author would not have spoken so slightingly of the *Jew's Harp* (which in his zeal for the house of David he wishes to have called *Jaw's Harp*), if he had heard M. Eulenstein's performances upon that instrument. The performer has sixteen *Jew's Harps* before him, of different sizes, and plays upon two at once, changing one of them on an average every half minute without interrupting his execution on the other. From this necessity for changing, it may be concluded that the sounds are of the nature of *Harmonics*. The effect produced, most nearly resembles that of a musical snuff-box; but with the power of swelling and sustaining the sounds. There are in fact two

* Added in 1839.

kinds of tone distinguishable; the one silvery and pure, the other a kind of drone like the sound produced by the instrument in the mouths of juvenile performers. The power of rapid and distinct execution, appears to be unlimited. The whole is a great curiosity, to those who desire to be acquainted with all the possibilities of things.

The "Enharmonic" of the ancients, was simply playing "in harmony *," by which they meant "in tune." It was an attempt, but not a successful one, to determine the perfect intervals in a single key, and afterwards transfer them to a variety of keys. This object is described with a wonderful clearness by the ancient writers on music.

Of the word "tone" (from τείνω, *to stretch*) there can be no doubt that the original meaning is "pitch." But the word is now ordinarily used to mean "quality of sound;" though the original meaning is preserved in "intonation" which means making sounds to be what is popularly called "in tune," and in fact in the word "tune" itself. But as the word "pitch" is at hand to express the original meaning, it is perhaps as well to agree to let the change pass.

The "attempts to underrate the musical knowledge of the ancients," (See Ch. iv. p. 65.) must have either been *without* evidence, or *against* evidence. Of the *compositions* of the ancients, nothing is known; it may be said therefore *cadit quæstio*, except it should be determined to infer that if the compositions had been better they would have endured. To which again might be answered, that no man can say they have not endured. Where musical publication was next to non-existent, everything must have depended upon tradition; and nobody can say how many of the traditional melodies of Europe may be ancient Greek. But on what may be called the *mathematics* of music, the ruins left are enough to show that the modern movements have been retrograde. Disjointed members and scattered fragments, as on the site of hundred-gated Thebes, point to the circuit of the ancient whole, and wait only for some organizing eye to recover its proportions.

PROGRAMME to the WESTMINSTER REVIEW for 1 October, 1833.

THE object of anxiety for all parties at the present moment is Portugal. A few shufflers pretend they care nothing about it; but they are nobody. The Tories are dying that *their* tyrant

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* 'The Enharmonic, so called from its being taken in the perfect intervals of whatever is the subject of the harmony.'—*Aristides Quintilianus*. B. ii. p. 111. See Article on the '*Enharmonic of the Ancients*,' from the Westminster Review for April 1832; in page 99 of the present Volume.

should succeed; the other side are anxious that it should at all events be somebody else. It would be curious to know how far, from the highest inclusive, the plot extended, for sending Miguel to do what he did; for that there *was* a plot,—that it was known, settled, and understood, at the time the Life-Guards were turning out before the sprig of absolutism in England and orders inditing for the troops on the other shore to aid,—is what the conduct of party men since, has demonstrated as clearly as anything short of Euclid. The postponing the recognition,—which, after success, must inevitably have come in time,—was a necessary stipulation. But it was all *amantium iræ*, the bye-play of two lovers that quarrel on the stage to deceive old Square-toes; there has been none of the wrath that would have attended a real dupery.

The great good of the thing, has been the unmasking. Time was, that these statesmen had half persuaded the public, that they were only men who wanted to be more careful than their neighbours; cautious by habit, conservative by principle. By this affair of Portugal and its filaments in other countries, they have been made to produce themselves as the supporters of "civil and religious tyranny all over the world." It matters not what be the religion, so there is a priest to domineer. It signifies not where is the tyranny; the one thing needful is that there be absolute power. Can any point in any struggle the British people has ever gone through for its political privileges, be shown where they would not have been in the ranks of the enemy? The inference is clear; they must be wrought out of existence like the Jacobites. A regular attack must be kept up upon the places where the *nits* grow; and in the next generation, the species will be extinct.

In the mean time it is clear a bolder course must be taken, in respect of union with what is liberal in Europe. What did the Whigs do in 1688 and afterwards? Did *they* play at bo-peep with the tyranny of the day; and send pious men to be delighted with the way it said its prayers? Not that a general war is the thing to be forced;—the enemy would have made one long ago if he had not been afraid, and things are going on much faster without. But the legitimates just now, are a nettle there is no occasion to be "tender-handed" with.

WESTMINSTER REVIEW, 1 October, 1833.

ART. I.—*On National Economy. No. VII.* Fraser's Magazine for Town and Country, No. 43, for July 1833.

'THE "Free Trade" question, though advocated by its partisans with the greatest zeal and pertinacity, has never yet received full justice at their hands.'—*p.* 103.

It is exceedingly easy to retort this charge. As proof of it, here follows a sketch of what a better-informed advocate than has yet appeared in public, might say in defence of the policy opposed to "Free Trade," or of what for convenience (whether with absolute correctness or not) may be called the "Mercantile System." There is sometimes danger in the weakness of an enemy; or at all events an able leader may convert past weakness into a source of present advantage. He may use it, for instance, as the means of drawing his adversary into an ambuscade; and when he gets him into his circle, he may conjure against him after a sort that never would have happened had the said adversary been prepared. The object therefore is now to tap and prematurely let off a Tory speech, which if brought forward in proper time and place, with *claqueurs* and other appliances to boot, might have been hailed of all admirers as creating great dismay in the ranks of the opponents*.

'The advocates, Sir, of changes in all our most important 'institutions and systems of policy, never adventure themselves 'in a fair field. Their combats are always carried on in a terri- 'tory existing only in their own fertile imaginations, and from 'which they have taken care to remove as far as possible any 'analogy with the real and tangible circumstances by which all 'sublunary questions are practically decided. And hence it 'is,—(and I say it without meaning to impute any deeper male- 'volence than is inseparable from the busy spirit of interference 'with the established opinions of mankind which is unhappily 'gone forth among us,)—that "they hatch cockatrice eggs, 'and weave the spider's web:"—should I be wrong if I pointed 'to myriads of my suffering countrymen as evidence that I 'might pursue the words of the inspired penman and add, "he "that eateth of their eggs dieth," (*hear!*)—or threw myself on 'the humanity of the assembly by which I have the honour to be 'heard, for giving effect to the cheering conclusion, that "their "webs shall not become garments, neither shall they cover "themselves with their works"? (*hear, hear*).

* An imitation was intended of the style and manner of an Anti-*Free-Trade* orator, at that time of high consideration with his party in the House of Commons and out.—*Added in* 1839.

'When the individuals who are so powerful in their own 'conceit, oppress us with their visionary reasons why we should 'abandon all of good that we have tried and proved, I would 'take them, Sir, to the cottage of the poor,—I would set them 'down by the bedside of the man that is ready to perish,—and I 'would demand that there and then we should record the answer 'which they would make, to the complaints of the sufferer 'charging them with being the immediate authors of his distress. 'In what language would they reply to the pathetic declaration, 'that till their innovation cut off the labourer's hire, all without 'was kindness and all within was peace?—how meet the languid 'eye, that wandered over present desolation, as if to reproach 'them with the comforts they had so cruelly displaced?'

'But I shall leave these scenes, as too keenly painful to 'humane and Christian feeling, and exciting, it may be, an in- 'tensity of indignation which may be represented as inconsist- 'ent with the immediate exercise of cool and unbiassed judg- 'ment. And how will they answer to an unvarnished state- 'ment, that shall appeal only to those feelings of a more con- 'centrated philanthropy, which whatever may be the obloquy 'it may expose me to, I shall not be ashamed to denominate 'patriotism, and trust to the judgment of such as yet hold to 'the sentiments of wiser and I am sure of *better* times, for my 'excuse and my protection? Suppose, then, that I should put 'the case thus;—that I should assume the instance of our 'great and ancient enemy, in whose altered views and harmless 'policy if I do not place the implicit faith recommended by 'some around me, I trust it will be imputed only to an intense 'and never-to-be-diminished anxiety for the preservation of 'those blessings (*buzz*) which the exertions of the brave (*cheers 'to the right*) and wise (*cheers to the left*) and good (*cheers 'all over*) of past times have confided to our keeping. Suppose, 'I will say, that France, by the merest and simplest preference 'of sugar the produce of those "ships, colonies, and com- 'merce" which with so little deference to the opinions of our 'political economists she has never ceased to covet, over sugar '(for example) the produce of one of the ephemeral republics 'of South America, should effect the creation of a colony, 'another Saint Domingo I will imagine, but free from the 'sources of danger which the state of slavery has been found 'to bring along with it, in short an *alter ego*, a new and auxi- 'liary department of the South or the South-West, an integral 'portion of territory and dominion, into which shall be trans- 'planted and set to grow with all the rapidity incidental to 'nature's earliest fecundity, whatever of good or evil princi- 'ples, habits, opinions, passions, may be considered as forming

'the aggregate which, if the term be not applied to the earths 'and fluids and minerals that constitute the soil, must be what 'is truly to be denominated France. Will our political arith- 'meticians deny that this is an increase to the actual strength 'and power, I will not say of our enemy, but of our rival? Will 'they meet me on the ground that a prudent and sagacious 'minister of this kingdom, who should embody those virtues by 'which the country has been saved in times of appalling peril '(*cheers*), and by which I humbly trust it will be saved in times 'of still more urgent danger that may be approaching (*in- 'creased cheers*), would cast this element of strength out of his 'reckoning, and make no additional preparation for the possi- 'ble hostile action of the mass? Will any of them pit his indi- 'vidual character for understanding, on the assertion that 'France with one or many such colonies, is not more formida- 'ble than France without? I may be told, that they would be 'taken from her in the event of a maritime war. But how if 'the strength derived from them should be employed and with 'success, in crippling the force to which we look for such re- 'sult? And even if all we calculate on should happen, would 'not the mere fact of having to encounter the operation of 'taking such colonies, be a draft upon our national energies, a 'drain and exhaustion *quoad*, of a portion of what would other- 'wise have been employed against our enemy in other quarters? 'The honourable gentleman may sneeze, but can he answer? '(*excessive cheering from all parts*). The question has been 'stripped of all the charms of oratory and all the delusions of 'language; and perhaps I am not too sanguine in believing, that 'from the humble effort of this hour may finally be dated at all 'events some check and alleviation of the ills which destructive 'counsels have poured out in succession on our countrymen.'

'Or if to some the past illustration should appear obsolete, 'and founded rather on the too much forgotten feelings of our 'fathers than on the interests most familiar to the existing 'generation, I might change it for another which may present 'the same argument in a more compressed and thence more 'impressive form. Let the case be put of a colony in the cir- 'cumstances, for example, of Sierra Leone,—or (if it be true 'that the obstacles so constantly opposed to the realization of 'the projects of theoretical benevolence have there been either 'intrinsically less formidable or more successfully overcome,) 'of Liberia;—and let the question be between procuring the 'requisite provisions or a certain proportion of them, from the 'surrounding natives, or by the establishment of what shall 'be denominated a branch-colony, a detachment of the same 'habits and feelings with the main body left behind, governed

'by the same laws and agreeing in viewing the same objects 'with attachment or aversion, with veneration or abhorrence. 'And suppose, as before, that the present and immediate in- 'terests,—by which I mean those considerations of momentary 'cheapness or the contrary which our political economists are 'so fond of holding out as the only rule and measure of states- 'manlike policy,—are so nearly or exactly balanced, that a 'pure inclination, a simply patriotic or might I not say *natural* 'preference to the industry of companions and friends, should 'be sufficient to secure (and for the honour of human nature 'I will take for granted that it practically *would* secure) the 'raising up this new part of the infant society. Barring then 'the vague and morbid philanthropy which would set off against 'this compact and visible advantage to the interests of the 'civilized race, the dispersed and finally very doubtful good 'which might have arisen from increasing the wealth of no 'man can tell what tribes of uncultivated savages,—I will ask 'with confidence whether, if with our senseless refinements we 'do not fly in the face of the Great Being whose voice maketh 'the hinds to calve and has assigned to every creature an in- 'stinctive preference for its own, here is not a positive good at- 'tained and placed to the account of that portion of the human 'family for whose welfare the Creator has wisely made us prin- 'cipally if not exclusively responsible. "*Spartam nactus es, "hanc exorna,*" was the maxim of the unaided wisdom, or I 'might almost say *piety* of the ancients; for patriotism is in 'my mind so closely connected with reverence of the Power 'which has ordained that in all ages and climates man shall 'prefer his country, as to make the terms almost identical. 'And where, I would gladly be informed by any of the sciolists 'of the present day, is the authority for believing that the broad 'ray of Christianity has removed or weakened any of the obli- 'gations which the imperfect light of nature was sufficient to 'demonstrate and impose?'

'But as one step gained towards the command of an interest- 'ing prospect leads to the discovery of another, so if I was not 'afraid of wearying the audience which has heard me with so 'much patience (*cheering*), I could tender a still more homely 'illustration, and one which will come yet closer to the minds 'and bosoms of many of the sufferers for whom I am at this 'moment a feeble advocate. In this great and eminently civi- 'lized country, where the division of labour in every possible 'direction has been carried to an extent which it is much easier 'to admire than to describe, there is a by no means inconsider- 'able class of the community who derive their support,—and 'it would be highly contrary to all the cherished habits and 'acknowledged partialities of my individual existence, if I were

'to leave it for a moment to be supposed I did not mean their '*merited and honourable* support,—from the profession and 'practice of music; a department of human occupation which 'though it may not compete in magnitude with the awful 'interests the conservation of which is so properly the object of 'anxious solicitude in this place, has at least this in common 'with any of the others, that it requires such exclusive attention 'and application as to unfit the applicant from either carrying 'on any other gainful employment at the same time, or chang-'ing with success to any other avocation after the best part of 'his life, the choice and flower of his days, has been devoted to 'this. In such a state of things then, there arrives a professor 'of foreign art. I will not injure the cause I plead for, by un-'fairly supposing that his powers are imaginary or exist only 'in the sickly feelings or corrupted taste of his audiences; but 'I will assume, for the present argument, that there is as exact 'equality as the circumstances are capable of, between him 'and our own countrymen. Neither will I attempt to excite 'prejudice by supposing that his demands or views are extrava-'gant or such as tend to revolt the feelings of patriotic humanity 'by comparison with the pittance of the toil-worn labourer of 'our own country;—I will not imagine that he is bent on 'building palaces in a foreign land, or on purchasing titles of 'distinction where unhappily such objects of ambition are to 'be sold;—but I will assume that he merely meditates a calm 'and competent retreat for his declining years, a modest esta-'blishment on the banks of the Arno or the Po, such as if it 'could be transferred to our own society would be the reward 'of alas too few, but still the *ungrudged* reward of successful 'and patriotic industry. Nor will I rest the question on the 'common ground of this retreat being purchased by the abstrac-'tion of a portion of the circulating medium of the country; for 'whatever regret I may feel in differing from many most esti-'mable individuals, I cannot avoid thinking that on this ground '*nature* (if I may be allowed to use the term with no sceptical 'or irreverent meaning) has benevolently provided against the 'occurrence of evil, and that the carrying away a portion of 'the current coin, so long as it has been obtained by the free 'consent of the holders and the way is open to the influx of the 'precious metals through the agency of those motives by which 'it has been wisely decreed that a diminution in the quantity 'of any coveted production shall of itself create the stimulus 'to the introdution of more, is no otherwise in itself an evil 'than the carrying away of any other article of foreign produce 'which the wisdom of the brightest ages of antiquity has always 'permitted and in fact encouraged our merchants to export. 'Having thus laboured then, to clear away all extraneous

'matter, and give to the opponents every advantage they can 'reasonably desire, I will confine myself to this single question '(*hear*),—Is not the mansion by the side of the Arno or the 'Po, created by the corresponding depression and putting 'down of the expected and not unfair reward of some of our 'countrymen at home; and is it patriotism (*hear*), or justice '(*hear, hear*), or policy (*hear, hear, hear*), to build up the edi-'fice in a foreign and possibly at some time a hostile land, 'which might have been added to our domestic sum of happi-'ness, to our home-bred mass of power,—for, Sir, the public 'happiness is power,—a unit it may be, but still a unit, to 'that aggregate which under the blessing of Providence we will 'show ourselves worthy to enjoy by never ceasing to protect?'

'If on this part of the argument I should carry my audience 'along with me, (and why I should apprehend the contrary,' 'even though as individuals they were vastly less endued with 'habits of sound reasoning and practical decision, is what I 'confess myself to be at a loss to understand), I would proceed 'to ask in the first place, whether any of the described benefits 'would be diminished, if the colony, plantation, or detachment, 'instead of being at a greater or smaller distance from the 'geographical limits previously occupied by the main body, 'was actually located within them. Would the agriculture, for 'instance, be less valuable in the eyes of a politician and a 'statesman, because it had robed with verdure or covered with 'waving harvests some integral portion of our ancient domain, 'which without it would have been a desert or a marsh? Is 'the circumstance of its being remote, in any way essential to 'its value; or is not its importance, on the contrary, incalculably 'increased, by becoming in place as well as in affections an 'integral portion of our country? And next I would ask, 'if it be undeniable that whether the distance be small or great, 'the substantial benefits respectively described must arise from 'the adoption of what I will take leave to characterize as the 'pure and healthy policy of natural patriotism, does it not 'follow with equal force, that if these benefits can be attained 'by sacrifices of any inferior amount, the difference is public 'gain? I plead for no gratuitous expenditure, no wasteful or 'unnecessary payment for what might equally be had without; 'but I put the question to the sound sense and impartiality by 'which I am surrounded, whether in this as in other corre-'sponding cases, the parting with the smaller amount to obtain 'the greater, is not true policy, and in fact the very essence of 'all by which commercial prosperity is to be courted or pre-'served. This is the much abused Mercantile System. This, 'with deference to all to whom deference is due, is the portion 'of the policy of our forefathers which has been selected to be

'made the butt of every small wit, the common mark for every 'cramped and contracted genius to practise on. A wise man 'might reasonably hesitate, and a good man tremble to decide, 'whether the fearful ingratitude or abject folly of this conduct, 'may be held to be most insulting to the Creator and injurious 'to his creatures!' *(Loud cheering from the Conservative benches.)*'

This would be a better defence of the "mercantile" juggle, than (whether it be in the portfolios of any of its defenders or not) has up to this time issued from their presses. Yet it was written every line with a consciousness of its unsoundness; a pure experiment, how easy it is to interlard the merest fallacies with clap-traps, and above all with what facility a continual reference to moral and devotional sentiments may be combined with the worst earthly reasoning and smallest practical beneficence.

The appeal to "humane and Christian feeling," and all the tropes therewith connected, may be disposed of by the statement that the appealers created, and at this hour sustain, the evils they complain of. They have interdicted the industry of the poor; and then attach the consequences, to those who oppose the attempt to relieve one sufferer by the privation of another. If a shipmaster had conveyed his crew and passengers to a month's sail from any land, with a week's provision left on board, and then instead of steering towards any port, should "do the pathetic" on the sorrow of one part of his inmates and the cruelty of not assisting them by taking from the portions of some other,—he would present the express image of such humanity and such Christianity. It would not be that there was not suffering, and that humanity did not desire to relieve it; but that the mode proposed was, like the Factory Bill, a fraud got up by the authors of the general misery, having in view the preservation and increase of that misery, through the instrumentality of the dupes who should be induced to cry out for the removal of the minor evil to the perpetuation of the greater.

But the mathematics of the proposition are the important part. And first for the "Saint Domingo" theory. The assertion then is, that if France by a simple patriotic preference of her colonial sugars to South American (the prices in the market being supposed the same) raises up a splendid colony in Saint Domingo, she gains the Saint Domingo. The answer to which is, that all she gains in the existence of her Saint Domingo, she gives up in the non-existence of an equal quantity of wealth and power of some kind, that might have been raised up within her own borders by employing the enterprize and capital sent to Saint Domingo, in another way at home. If the

people who would have created the goods at home for barter with South American sugar, would have demanded payment,—so do the colonists. If the colonists spend this money on such produce of the mother country as they want for their processes and personal consumption,—so would they have done if they had staid at home and applied their capital and industry to creating the goods for barter with South America.

The best key to the solution of this problem, is in taking the diminished case; for magnitude has a wonderful effect in confusing men's ideas, and causing the loss of the clue to sound conclusions. Take then the case of the little African settlement, and suppose that a hundred tons of rice can be grown annually in the proposed branch-colony by the labour of a hundred individuals, and that there are a hundred individuals in the primary settlement to whom from their habits and other concomitant circumstances it is indifferent whether they go forth to raise these hundred tons at the distance of it may be a hundred furlongs, or apply themselves at home to create or collect such articles of produce as either directly or by means of some circuitous exchange (as for instance let them cut down timber and exchange it with shipping for silver or for gunpowder) shall procure a hundred tons of rice from the surrounding natives. Under these circumstances there would seem to be no difficulty in conceding, that putting out of sight what may be called *accidental* considerations, the case is one of balance. If the governor of the greater Barataria wants an outpost a hundred furlongs off, to watch or check some apprehended enemy, the branch-colony may chance to answer this purpose, and so far save the expense of a lieutenant's party; or if on the other hand a division of his forces would be an evil, this might be a reason for keeping the hundred individuals at home. But either of these is a purely accidental consideration, and of no effect upon the general question. If then the governor happening to have an agricultural and colonizing crotchet, should encourage the hundred individuals to go out and establish the branch, and should boast of its establishment as a visible step taken at the instigation of his genius towards the general prosperity; it would be in the power of any man to answer him, that all that had been done in the way of colonizing abroad, had been effected by the removal of an equivalent portion of a timber trade at home, and therefore the difference, if any, reduced itself to the difference there might be between having the same number of individuals posted at a distance and at home. And if on the other hand, the governor had nice notions of compactness and rather a high opinion of his personal presence,—was in short a little fidgety at the idea of

so many precious souls being left to follow their own devices out of sight,—he would probably throw cold water on the branch project, and harangue on the advantages of union and domestic industry. But on this side also it would be plain, that as concerns the general question, His Excellency's opinion was wool-gathering, and that the true and simple state of the case is, that the two courses are indifferent, and all the wisdom of the officials cannot make it otherwise.

If in this state of things any argument were attempted to be got up, touching the advantage that would arise to the domestic manufactures of the parent colony from having to supply the wants of the branch establishment; it would be plain that the same individuals who were to use manufactures a hundred furlongs off, would also have used manufactures if they had been carrying on a timber trade at home, and consequently, though there might be some change made in the *kind* of manufactures demanded for consumption, there could be none in the aggregate, and all plans, pleas, or pretences, for raising up an aggregate increase to the manufacturing interest either by sending out the branch settlement or the contrary, would be shadow and smoke. And the same conclusion would hold good of any attempt to decide one way or the other by the love of countrymen or of their industry; unless reason could be shown why men should love a rice-planting countryman and his industry, and should not love a timber-cutting one.

If in the progress of events a decided leaning should be displayed towards one course rather than the other,—as for instance if a number of individuals should voluntarily remove themselves to the branch-settlement, and establish the fact of their prosperity by offering more rice, and consequently at a somewhat lower price, than appeared in the market antecedently to their new speculation;—and if the Governor, acting upon his love for compactness and his dislike of what he might be pleased to view as a species of schism prejudicial to his authority, should lay a tax on the rice of the branch-colony by way of wholesome check to such irregular proceedings;—it would be palpable that he was in reality forcing men to take the worse mode of rice-making instead of the better, and so far injuring and keeping back the welfare of the community. And if in the pride of his heart he should take some superior officer round his wood-cutting establishments, and dilate upon the importance of the interest which had thus been created by the act of his legislatorial wisdom, it would be competent to any malignant rice-eater to interject, that all this had been done at the expense of destroying something of greater worth that might have been, and that the proof was in the tax which it had been

necessary to lay in order to prevent the other from growing up instead.

So on the other hand if the attempt at the branch-colony had been made, but it had been discovered that the adventurers could not keep soul and body together by furnishing rice at the old market prices;—and if the Governor in his zeal for foreign progress had proceeded to prop up this slight deficiency by taxing the rice which should be procured in exchange for the industry of wood-cutters;—it would be as plain as in the other case, that the greater had been sacrificed for the less, and that the Sancho Panza who should point to his distant settlement as the offspring of his genius and his policy, would have only shown that he was fitter for watching the frying-pans of a fat kitchen, than for regulating the interests of assemblages of his fellow-men.

The sole measure then of the general utility or harmfulness of such a distant establishment for raising any particular kind of produce in preference to procuring it from foreigners by exchange, whatever be the scale, (excluding the very limited circumstances under which there may be question of the policy of making temporary advances in expectation of distant returns), is to be looked for in the fact of its being profitable to the conductors or the contrary, under a state of non-interference. If the establishment has been gainfully carried on under the free competition of all men, there is ground for pronouncing that the community cannot have lost; though not for attempting to show off the *whole* of the distant establishment as a gain to the society that could not have been obtained without it. On the contrary the fact may be, that there has been neither gain nor loss;—that the establishment abroad has been created by the removal of a precisely equal quantity of prosperity of some kind that might have been created at home, or at all events of a quantity inferior only by the least that was required to turn the scale. But if the cockered and favoured establishment, (whether it be an establishment for producing cane sugar in Saint Domingo, or beet sugar at home), has been raised by the operation of bounties or duties laid on other sugar in its behalf,—then there is evidence that a pint has been produced by the sacrifice of a quart, and there has been a distinct piece of foolery somewhere. But what is true in respect of domestic interests, is equally true of foreign. A Saint Domingo can be no accession of strength to France as regards foreign powers, if it has been only an integral part cut out of what would otherwise have been her wealth and strength within her own borders;—still less if it has been raised up by the sacrifice and destruc-

tion of a *greater* quantity of wealth and strength that might have been, at home.

The third or last statement,—which invites a comparison between the house raised for the foreign musician on the banks of the Arno or the Po, and the house which might be raised up in Regent Street for his English rival if the public would only patronize home-made music instead,—is founded on keeping out of sight the house or houses, or other benefit equivalent in the whole however subdivided, accruing to the dealers in those goods in which the payment on the Arno or the Po is veritably made. If instead of other goods the payment should be made in gold either coined or rude, then the benefit, be it great or small, is to the dealers in the British manufactures directly or indirectly transmitted to Peru or elsewhere in consequence, for gold to fill up the void; and if it is not in gold, then to the dealers in the wares concerned. The importation of a Roman harper, to be paid with a country-house upon the Tiber, is in no way essentially different from the importation of Roman harp-strings, to be paid for to Rofino and Co. with a house in the neighbourhood of the Forum Boarium. It is not the house in Rome, that is the English interest to be set off against the house which might be raised for the maker of English harp-strings by a prohibition; but it is the house, or benefit equivalent, that is to be raised for some individual or class of British traders, who are to be the means and instrument of procuring the Roman harp-strings, and whose trade will be wantonly and uselessly put down by prohibition of the foreign article, leaving no national balance except the loss, detriment, or grumbling of the consumer of harp-strings, who is obliged to use bad in the place of good, for no earthly benefit to his country's commerce in the aggregate, but simply to please the fancy which somebody has taken for bad harp-strings being made in England. And in this there is nothing but what is common to all cases. Take, for example, the French silks;—and it is not the country-house of the capitalist at Lyons that is to be set off against the *rus in urbe* of the master monopolist of Spital-Fields, but it is the improved living, whether embodying itself in houses or any other form, of all the British workmen and manufacturers who would in a state of freedom be employed by the demand for goods to be exchanged for silks in France, and by the further expenditure of the difference left with the consumer by the absence of the monopoly,—to all which must be added, as what finally remains upon the balance of the account, an amount equal to this last-mentioned expenditure over again, in the shape of the gain to the consumer, or if preferred, his enjoyment of the additional articles procured for him by the expen-

diture. If instead of paying a higher price for the same article, the effect of the monopoly is to make the consumer pay the same price for what he considers inferior; then there is an exact balance as before on the gains and losses exclusive of the consumer's, and what finally remains on the negative or losing side of the account is the vexation, grief, or in one word *loss* of the consumer, in being made to give the price of the better for what he considers the inferior article, for no advantage to the rest of the community in the aggregate, and for no man's benefit but the dishonest one's who is anxious to secure sixpence to himself by dint of taking a greater amount from other people.

The case where foreign goods should be paid for with coins taken from the circulating medium, may be dilated on more at large, since the opponent seems to stand upon it; though it was supposed that this portion of the currency juggle had long since been abandoned. Every government that coins gold, does it by some rule or other having reference to the market price of bullion. Some coin as long as ever the coins will buy as much metal as is contained in themselves, and the least quantity more that will induce men to take the trouble of asking to have standard bullion exchanged for an equal weight in coins. Others, wiser, coin no longer than men will give for the coins their weight in metal, and as much more as will pay for the fair expense of coining. But whether the government takes the wisest rule or not, it takes *some* rule. And if coins are abstracted from the circulation and sent abroad in payment for foreign goods, the consequence is (as is in fact insisted on by the opponents) to make money prices fall or the coin buy more of goods of any kind than it did before, till the state of the circulation is restored. It must therefore buy more bullion; and the consequence of this change in the price of bullion, is to put the government, the moment the difference amounts to as much as will turn the scale, upon buying more gold to make into coins; which addition to the demand for gold, creates just as real an addition to the demand for some British manufactures or other, as an addition to the demand for Turkey coffee or any other article that is the subject of a transit trade. Do the Tories think gold and gold coins are found in parsley-beds, or under apple-trees? or in what way do they think the supply is regulated, but by the same rules that direct the procreation of any other sublunary ware? If the markets in the gold countries are already "glutted with English goods," a new demand for ten thousand ounces of gold will not be a whit less a god-send to the English owners. If they are involved to the amount of 100,000*l.*, it may be only 40,000*l.* towards their deliverance; but 40,000*l.* to a man's ac-

count is 40,000*l.*, whether he may chance to be involved to the amount of 60,000*l.* more or not. There is an end therefore of the Tory miracle, of our gold running out of circulation at the rate of a million a-year, and still the wretches being able to find a guinea to fee a doctor with;—for it is the story of the horn given to Thor to drain, which communicated with the sea behind. This is the answer to the "circulation" fallacy; an answer quite competent to show, that there is no harm in foreign goods being paid for in sovereigns if it *is* so, but on the contrary as much good as in any other transit trade. At the same time the fact is understood to be, that French goods are *not* paid for by a transit of either sovereigns or bullion, but by certain descriptions of English manufactures openly transmitted through the custom-houses to countries bordering on France, and thence conveyed to their destination through the agency of what has been denominated "God Almighty's knight-errant in defence of honest people against knaves and blockheads,"—the smuggler. There is no use in making a secret of it; the time cannot be far off when any government will be considered as out of the pale of civilized powers, that keeps a custom-house officer.

The above is all, the introduction of which appeared to hold out a competent motive for reference to the Article quoted from. The subsequent attacks on the supporters of Free Trade, are such as, though they may confirm the foolish in their folly, will lead the inquiring mass to examine for themselves in the writings of the other side whether these things are so or not; and the result can only be favourable to the truth. There needs little prompting to find out, that when Mr. Booth says, though "the general reasoner is satisfied," the "merchants and parties interested are dissatisfied with the unavoidable conclusion,"—he means "the merchants and parties interested in the preservation of the monopoly." For example, when the makers of cotton-twist at Blackburn brood over the fact that French silks are chiefly paid for in their twist (albeit through the intervention of the smuggler),—it would require more evidence than has yet been produced, to prove that "*the merchants and manufacturers of Blackburn* are dissatisfied with the unavoidable conclusion." In the same way when the Westminster Review is asked to "point to a single branch of trade or manufacture which has been benefited by the nostrums of the theorists,"—if the meaning is that it should point to any branch of trade where the traders rejoice at the loss of what they consider a gainful monopoly, the question is a hard and cruel one. But if the design was to ask whether any branch could be pointed out which had been benefited by the removal of the monopoly of any other branch, the Blackburn instance is ready in point; and it is equally demonstrable in any other case,

that the foreign goods imported through the destruction of a monopoly, must be either paid for with the goods of some Blackburn or other, or (which nobody is given to believe) procured for nothing. It may not be "fun" for a man to give up sixpence he gains by a dishonest monopoly; but still less is it "fun" for honest men to give up ninepence, that sixpence of it may go into the pocket of the other.

Of the same cast and quality is the attempt to quarrel with the demanded substitution of "universal" for "abstract" principles. Of course "universal principles" meant principles "universal [as the Americans say] if true;" it certainly did not mean "universal if false." There was no attempt to bar debate whether any set of principles was true or not; but only to point out and maintain, that there are certain principles of which it is possible to ascertain by experiment and the use of reason, that if they are true at all they are true universally. It is a stale discovery to add, that those who delight to call themselves the "practical men," are men who insist on looking at one side only of the practical question, and those they call "theorists" look at all. The so-called "theorist" builds his conclusions on practical data as well as the other; he makes out a regular debtor and creditor account, ending in a balance of loss. The man who assumes to himself the title of "practical," declares he has a theory, *that it is proper to look only at one side.*

WESTMINSTER REVIEW, 1 October, 1833.

ART. V.—*London University Magazine, No. II. for July* 1833. *Note on "Austin's Province of Jurisprudence Determined," p.* 137.—London; J. M'Gowan.

THE Tories hate the London University, as they hate an omnibus or a cabriolet, and for the same reason. It is quite clear that something has been done by it for the middle and under classes; therefore in their eyes it is beastly like the owners, and the branch despots and their toad-eaters abhor it as they love an Inquisitor or a Cossack. The combat *à la mort* was of their own beginning; and though they may wound the people's heel, the end will be to bruise the serpent's head. In this view it is especially fortunate when the enemy will bestow his venom on the rising generation. Every pubescent youth now shaving for a beard in the vicinity of Gower-Street, is destined to tell his children if he lives to have any, how in his time the "all slavery" party in England,—who wherever two or three were gathered together to oppress, were there in the midst of them,—were strong enough to call their betters ill names by their hirelings, and show their faces in an occasional majority in a Second Chamber.

These same youths, without longer tarrying at Jericho, have resolved on setting up a publication ;—by far the best mode of study, if conducted with moderate judgment and felicity, of any that can befall the human scholar in the interval between childhood and senility. The stimulus to exactness, the opportunity of comparison with subsequent performances and those of others, the power of being known or not, the ready and almost indestructible faculty of reference,—all point out this as a sort of steam-engine improvement on the ways in which men have been wont to cultivate the talents they possessed. The warnings to be offered are few ;—to despise rhetoric, and eschew fine writing ;—to be always afraid of having too much to say, never of too little ;—to ware flippancy and bad jokes ;—to avoid epithets, and all but annihilate adverbs ;—to let the last thing ever brought before the reader, be the two-legged thing sitting on a three-legged stool, that writes,—or what *he* thinks, *he* feels, and *he* will or will not perform. If the dunce has a reason for "thinking," why does not he give it ? If he has not, why does not he say nothing about it ? And farthest of all,—*procul ab amicis*,—be the degrading "*We*,"—the effort of one blockhead to gain importance by representing himself as many. As an experiment, let any person who has fallen into this lowest slough of humility, resolutely purge his performance of the filthy figure, and see if it has not the same kind of effect, that a clean shirt and a razor have upon the miserable who was in want of them. Along with these provisions, let there be some object, and always "to edification ;"—something to be made clear, if it be only to the writer ;—some invitation to a friendly passage of arms, for the sharpening of two parties at once to the defence of the common truth ;—something to be done or prepared for, which the man may point to hereafter and say, "See how long it is, since I began to labour in the attempt to be of use."

This is by the way ; the original purpose having been only to take up a question on which both the original and the commentary seem to leave something to be added. The matter in dispute, is the propriety of resistance to *bad* government. And the defect of both the original and the commentary, appears to be that this question is confounded with the propriety of submission to government in the abstract. Is it proper to pay bills at taverns ? Is it right to eat eggs ? The severest moralist will allow that it is at least permitted. But is it incumbent to pay *fraudulent* bills ? Is it a moral duty to eat *rotten* eggs ?

The answer to this is clearly, "Not if you can help it." If you cannot help it, the case is altered ; and whether you can or

not, must be determined on knowledge of the circumstances of the case. When it is announced as an inflexible rule of morality, that, for instance, no man is on any account to steal; what is asserted is, that it is for the general happiness that no man, however useful it might be to himself, is to be allowed in any particular case to steal;—that it is a point settled, signed, and sealed with the signet of mankind in their corporate capacity, that the good which may arise to any man or men from a particular act of stealing, never will or can overbalance the evil which, directly or indirectly, would arise in the end from the permission. But is there any such acknowledgment on the subject of submission to bad government? or is there not on the contrary a general avowal, that resistance to bad government, is and always has been, the grand instrument of human happiness, the spade, the pick-axe, the crow-bar, by the resolute and sagacious use of which is won and kept, all that the least of us has of comfort or well-being;—that in fact if there be any virtue or any praise,

"It is this—it is this."

The whole postulate that requires submission to bad government at all, is like the postulate that should demand the eating of rotten eggs; there is a failure to make out any obligation to begin with. If indeed any quantity of extraneous evil be hanging over the non-performance,—as, for example, if a sanguinary savage were waving a scimitar over the recusant,—it would be the part of a wise man to compare the two evils. Or in like manner, if a traveller was charged for twenty dinners he had never eaten, in a country where the attempt at complaint would probably be followed by the bastinado if not the bow-string,—he might do quite right on reflection to put up with the injury. But this is the moral duty of out of two evils chusing the least; not any abstract duty of paying for dinners that were never had. To maintain such a duty in the abstract, would in fact be overthrowing what security for justice the world may have, and setting up the hugest Moloch of immorality that rogues could desire in its place; and just the same would be the consequence of setting up the doctrine that bad governments are not to be resisted.

If any man in defence of overcharged dinners, should urge the great utility of taverns, and the desperate consequences that would arise to the community from their bills not being paid; he would be answered that this was true of *just* bills, but not in the slightest degree of *unjust*. No man wants to hurt honest tavern-keepers, nor decent governments; but their use will not consecrate their abuse. It is no more true that the

alternative is between submitting to bad governments and having no government at all, than that it is between eating rotten eggs and having no eggs brought to market at all. There is an aristocratical or governmental fraud in the assertion, that it is necessary to coax governments into existence by the endurance of their misdeeds;—they will bear a great deal of mending and still consent to act. It is not true that there is the asserted connexion between touching a bad government and anarchy. It may be true enough that all bad governments when touched cry "anarchy;" but history has proved that what they call anarchy is the life's blood of honest men, the one sole thing by which they live and flourish.

The mistake then, is simply in supposing that submission to bad government is to be classed among moral duties at all;—or more strictly in overlooking, that *resistance* to bad government is the moral duty, whenever the probable advantages of success are greater than the probable suffering from opposition. It is in fact the case of resistance to any kind of robbery and mischief. Men must after all be responsible for exercising a sound discretion as to consequences; as a man must be responsible who chuses to fire on a superior number of armed highwaymen. But the moral duty is in impartially estimating the probabilities of success in the particular case; not in giving a *carte blanche* to all present and future minions of the moon. Hear what Blackwood's Magazine quotes from Burke, with only a change of name for the subject on the table.

'Those who give and those who receive arbitrary power, are alike criminal. There is no man but is bound to resist it to the best of his power, wherever it shall shew its face in the world. It is a crime to bear it, when it can be *rationally* shaken off. Nothing but absolute impotence can justify men in not resisting it to the utmost of their ability*.'

WESTMINSTER REVIEW, 1 October, 1833.

ART. XII.—*Treatise on the Construction, Preservation, Repair, and Improvement, of the Violin, and all Bow Instruments, together with a Dissertation on the most eminent Makers, pointing out the surest Marks by which a genuine Instrument may be distinguished.* By Jacob Augustus Otto, Instrument Maker to the Court of the Archduke of Weimar. Translated from the German, with Notes and Additions, by Thomas Fardeley, Professor of Languages and Music, Leeds.—London; Longman. 8vo. pp. 66. 1833.

"THERE is an art in everything;" as a late mathematical professor and dignitary of the church, of Cambridge, said on seeing a glass of the poor creature small beer scientifically

* Blackwood's Edinburgh Magazine, No. CCXII. for Sept. 1833, p. 334.

filled by a London waiter. As it is difficult to yield assent to the creed of a Yorkshire ploughman, that there are three hundred and sixty-five bones in a pig's foot; so, who would have believed there were fifty-eight pieces in a fiddle, and yet it seems it is so, upon the authority of Herr Otto, Musical-Instrument Maker to the Court of the Archduke of Weimar and the University of Halle besides, at which last-mentioned city and seat of knowledge, together with his two sons, he "undertakes the trial and probation of Violins, and will be happy to attend to any communications from his patrons and friends." He has moreover "now had thirty years practical experience in the restoration of such ill-fated instruments" as have got into the hands of repairers,—a crying evil under the sun,—"and the construction of new ones, and has besides this studied music, mathematics, physics, and acoustics,"—from which he thinks himself qualified to grapple w. h those other sources of human error and disappointment no less worthy than the preceding of the attention of the utilitarian and philosopher, through which "parents of accomplished minds" "have frequently gone to the expense of ten pistoles for a Violin, which was worth scarcely as many dollars." There is considerable art in this climax;—no fee grief, but a whole family, an accomplished one too, lamenting over a disappointment in a violin.

'The Violin justly holds a pre-eminent rank amongst all instruments played with the bow [and it might have been added, *without*]. It may indeed be termed a perfect instrument, as by the peculiarity of its construction, the minutest gradation of tone can be produced upon it.'—*p.* 1.

Old Mersennus and nobody else, has the credit of finding this out, at a time when the Violin without frets was only beginning to be considered as a practicable instrument, and antecedently, it is imagined, to the establishment of that orchestra by Louis XIV, or its imitation by Charles the Second, which the musical antiquary recognizes as commemorated in the ditty of "Four-and-twenty fiddlers, all in a row."

Passing by Statelmann of Vienna, Jauch of Dresden, Whithalm of Nuremberg, Hoffman and Hunger of Leipzig, Buchstaedter of Ratisbon, Hassert of Rudolstadt and him of Eisenach, Klotz in the Tyrol, Rauch of Breslaw and the other of Würtzburg, Riess of Bamberg, Scheinlein of Langenfeld, Ruppert of Erfurth, Francis and George Schonger and Bachmann of Berlin, and Straube of the same favoured place, Ulricus Eberle and Charles Helmer of Prague, Samuel Fritzsche of Leipzig, Durfel of Altenburg, Schmidt of Cassel, and many others,—all great men in their generation, each sitting at this

hour under his vine and fig-tree, and able to furnish a violin might win Eurydice from the infernal gods,—the principal head of dispute appears to be between the *flat* model and the *deep*. The approved result may be assumed to be, that the flat model makes most noise, but the deep has the most sweetness, and it might be added variety, of tone. This last quality is conspicuous in the case of guitars; and it is presumable that the same will hold in all other instruments that come under the head of "*fidibus canoris*." The flat instrument is well for a rant or a rattle; but it is the deep one that has "the tones."

In violin-building as in ship-building, it might easily happen, that the choice models of a hundred and fifty years ago should be easily surpassed. Among them there must be a best; but who knows but there may be a better than the best? Has anybody tried? For example, is it written in the tablets of any of the makers above cited from Statelmann to Schmidt, what would be the qualities of a violin of double the ordinary depth, other dimensions remaining unaltered,—what of one of half,—what would be the effect of adding or subtracting some given quantity to the dimensions all round*,—what of applying the neck of a violin to the body of a tenor, and putting on the strings of a violin? Nobody could be so favourably situated for experiments of this nature as a great maker; who might trace the consequences of gradual alterations, in a way that would not prevent the instruments from being as saleable as before. And there would be no necessity for the experiments being made upon instruments of the first quality and value; for it is presumable that what produced a comparative improvement in one kind would do it in another. Pardon of all the Herrn, if this has been done, and it has been ascertained that the true proportion, the Medicean form of fiddles, is in the precise Cremonese model of 170 years ago and no where else. But if this has been done with violins, it has not been done with shipping; and a ship is a machine in the improvement of which a larger mass of interests is daily and hourly concerned.

Herr Otto has also been a copious maker of guitars, and rejoices in having been the first man that ever put a sixth string to an instrument of that kind.

'The late Duchess Amelia of Weimar having introduced the Guitar into Weimar, in 1788, I was immediately obliged to com-

* The writer of this once undertook to try the effect of adding an inch in all directions to the dimensions of a guitar; but the maker could not find in his heart to add it to the depth, and so let down the experiment. The instrument produced, was powerful in the bass strings, but not improved in the treble.

mence making imitations of this instrument for several noblemen, which soon obtained so high a repute in Leipzig, Dresden, and Berlin, that for sixteen years I had more orders in hand than I could execute.'

'I must in this place observe that the Guitar had originally *five* strings only. The late Herr Naumann, *Maitre de Chapelle*, at Dresden, gave me the order for the first Guitar with the sixth or low E string, which I added according to his instructions. Since then the Guitar has always had six strings, for which improvement amateurs have to thank Herr Naumann.'—*p.* 41.

In his experiments on different parts of his instruments, the author does not appear to have made any on the tail-piece. For the chance of this coming under his or other experienced eyes, repetition is made of the fact mentioned in a former Number*, that in a guitar with a tail-piece the tone was greatly diminished; and on the other hand, was increased considerably above the ordinary, by attaching each string to a separate pin at the back of the instrument. But there arose the defect, of the string being unsteady in pitch, in consequence of the elasticity of the added part; an evil which might possibly be remedied by attaching each string to a separate steel wire reaching nearly to the bridge.

The book concludes with a theory concerning the improvement made on instruments of the viol kind by playing on them in certain described ways; which, without scrutiny of any kind, is given entire.

'That it is not *age*, but the constant use of an instrument which produces a smooth clear tone, is an incontrovertible fact.'

'I have by me some common-made Violins which had been used by a village musician for twenty years in playing dances, and being in a damaged state I bought them at a very trifling price. Finding, upon examination, that they were strong throughout in the wood, and had good red deal bellies, I tried what could be made of them by giving them the true proportions, and succeeded in obtaining a Violin, which, although every connoisseur immediately knew to be a trade fiddle, yet the tone turned out by no means inferior to an Italian one. I sold it to the concert director at Fulda for forty dollars. From this circumstance the idea occurred to me that a vibration kept up for a length of time tended to extract the resinous particles from the wood, and make it more porous and better adapted for producing a good tone, and such is the fact. This induced me further to try what improvement in the tone could be effected by a constant playing of two tones in fifths: after an hour's exercise in this manner, these two tones became much less rough and glassier than any other in the instrument. Having now discovered that two tones played together with a strong

* For Oct. 1832, Art. 4. See page 283 of the present Volume.

bow produced a greater volume of vibration, I then tried it by fourths throughout all the tones. They all experienced alike the desired improvement, and A sharp and C sharp were equally as good as D or G. The reason of this singular effect my duty to my family prevents me from divulging. [*It should rather have prevented divulging the way in which the improvement was effected.*] I shall however notice the alterations it produces in the tone of the instrument. When the instrument is first put into use the tone is clear and easily brought out. By practising it, however, eight days in the manner above, the tone becomes harsh and offensive to the ear and difficult of production: the instrument then appears as if it would never be fit to be heard again. In this second stage the greatest number of instruments are spoilt, from the want of patience in the professor or dilettante, by scraping out the wood, alteration of the bass bar and other contrivances. Those that are weak in wood become bad in this process, and never afterwards improve. They never reach the third period. But by persevering in exercising on two tones together it gradually reaches the third period, as the instrument, like wax, receives every impression, and eventually recovers its fullness and power. It then becomes easy in the tone, and acquires the beauty of an instrument which has been long in use. This, however, requires three months continual practice. A Violin proved in this manner cannot be afforded under thirty dollars, nor a Bass under fifty.' *p.* 63.

The Instrument-Maker to the Court of the Archduke of Weimar should employ a steam fiddler. What class of men can it be that is employed in educating fiddles at the salary of apparently a shilling a-day? Can no means be devised, to make a "vibration" that shall do the work of three months in a week? Is there no Lancasterian or Hamiltonian system, or *enseignement mutuel*, that could be applied to train up many viols in the time of one? It would be for the credit of German genius, that something should be done in this way.

WESTMINSTER REVIEW, 1 October, 1833.

ART. XVI.—*The Evils which afflict Ireland referred to Primogeniture, the Laws of Entail, and the Legislative Union of that Country with England.*—London; Effingham Wilson. 8vo. pp. 40. 1833.

A BATTERED subject like Absenteeism would not be introduced here, unless from the notion of having something to say upon it that may tend towards the removal of this *opprobrium* of Political Economy. And the object is now to try to show, for the consolation of such as may be distressed by representations like those in the pamphlet cited, that the question will resolve itself into a corollary from the principles of

Free Trade, or more strictly perhaps, a complicated modification of the general proposition.

Take then, as the simplest and *First Case*, that of a man who is told it would be patriotic to drink ale, but prefers claret. "If you will drink ale," says his adviser, "you will do a mani-"fest good to malt and hop growers, who are your dear country-"men." "If I drink claret," says the respondent, "an order "must be given to somebody for British goods to pay for it "with, which would not have been given without;—as for in-"stance to the men of Sheffield, who are as dear countrymen "as the other." And if attempts were made to puzzle the question by supposing the claret to be paid for in Turkey coffee or Peruvian ingots, he would reply that the transit trade,—the buying of a bag of coffee in Turkey, or a wedge of gold in South America, for the purpose of being finally exchanged for his claret,—was just as good as any other trade, as concerns the necessity of an order for some British goods or other from the makers or producers. Or if a daring adversary pushed him with the further refinement of supposing his claret to be paid for with sovereigns taken from what the Tories affectionately call "our circulating medium;" he would answer, that the only consequence of this would be to set the government upon making new purchases of gold, for the purpose of coining to supply the void,—which just as much causes a new order for British goods from somebody, as any other of the processes supposed*. In all of which, the pith is, that the man's claret-

* The mode in which the demand for coining is brought about, has been gone into in the Article entitled *A Free Trader's Defence of the Mercantile System.* See page 477 of the present Volume.

It is further worth notice, that nature has not left it to depend upon the wisdom of the government or anybody else, whether a gain to counterbalance the privations of the ale-dealers shall arise somewhere or not. If the government has not wit to coin when men will give more for the coins than they cost, the only consequence will be, that the place where the gain arises (the *locus* of the gain, as a natural philosopher might call it) will be shifted. Instead of a gain to dealers in goods demanded to pay for new gold, there will be a gain of exactly the same aggregate magnitude, to the holders of the coinage that is left; in consequence of the value of their coins having risen in their pockets. This change of value will further cause a certain advantage to all old creditors, and an equal disadvantage to their debtors; which, on the mere question of account, may be set off against each other. There is therefore in the final aggregate, only a shifting of the *locus* of the gain that is to counterbalance the privations of the ale dealers; and the same conclusion, if the inquirer is disposed to be so minute, may be applied to the small diminution in the number of coins, which will be required to turn the scale and set the government upon coining.

If instead of new coins there should be an issue of paper by either public or private bankers, then the gain that is to counterbalance the privations of the ale-dealers must be looked for in the strong boxes of such bankers and their confederates, or wherever else they may have bestowed it. But somewhere the gain is; earth will not hide it, nor sea cover. It may be dissipated or divided; but it is as impossible to annihilate it, as to annihilate a particle of matter.—This is some of the physico-theology of Political Economy.

drinking causes a new and additional order to be given for Sheffield goods or some other kind, just as much as his drinking ale instead would have caused a new and additional order to be given for ale; and that, razors against ale, there is no reason why encouraging the one is not as good for the commerce of the country as the other.

Second Case; Suppose the claret-lover to be at the same time the Sheffield manufacturer; and let him pay for his claret to a wine-merchant in money. This is virtually the same case as the last; for the union of the claret-drinker and cutler in the same individual, produces no ulterior effect upon anything.

Third Case; let the claret-loving Sheffield manufacturer be his own wine-merchant, and send cutlery of his own making, to be bartered at Bordeaux for the desired claret for his own consumption. And further let it be supposed that he has sent all his stock of cutlery into the market the day before; in consequence of which he goes into the market with money and repurchases a box of it, to be forwarded to Bordeaux. In this case again, all the essential circumstances are unaltered. His going into the market and buying the box of cutlery, is just as much a new order in the cutlery market, contingent upon his resolution to drink claret and that would not have existed without it, as would have taken place if the business had been put into the hands of a professional wine-merchant.

Fourth Case; instead of having the box of cutlery to repurchase, let him send it at once to Bordeaux from his own warehouse, without ever allowing it to show its face in the home market at all. How, in this case, is the benefit to cutlers preserved? Clearly by the fact that sending any quantity of cutlery into the home market and taking it out again,—or never sending it at all,—are to all intents and purposes concerned, one thing and the same. Let a thousand boxes be what can be sold with the needful profits in the home market,—and if the Bordeaux box had made one, there could only be 999 of other people's. But either remove the Bordeaux box or keep it out of the market altogether, and there will be a demand for 1000 of other people's instead of 999; which is one more than before. Either the removal of the Bordeaux box or keeping it out of the home market altogether, is therefore tantamount to causing an order to the Sheffield trade for one new box of cutlery, or in other words for one box of cutlery that never would have been ordered if the Bordeaux box had been thrust into the home market instead of being sent abroad. In like manner, universally, finding a market for any kind of goods abroad, is tantamount to causing a new order to some-

body for an equal quantity of goods at home, and benefit to this amount will accrue and be subdivided among the dealers concerned in the trade which gets the order. And the causing this new order is as good for the parties who receive it, and for the rest of the country in the aggregate,—as the giving an order to the same amount, for that or any other thing, to the same or any other parties in the country, for the personal consumption of the purchaser.

Fifth Case; let the Sheffield manufacturer not only love claret for his drink, but Perigord pies for his dinner, French silks for his waistcoats, French gloves for his hands, and French slippers for his feet, and if it be possible let him take an oath and keep it, that he will consume nothing but what shall be of French origin. And to this diabolical determination, let him add the infernal ingenuity of resolving, that as an economy, instead of bringing his claret and his Perigord pies to himself, he will convey himself to the claret and the pies, and his razors with him to pay with. And what difference will that make,—except depriving some British dealers of the freight of the claret and the pies to put it into the pocket of the economizing gourmand, and giving to some others the price of his passage in the steam-boat? In whichever of the ways herein before supposed the payment for these French goods takes place, no other important alteration would appear to arise out of the simple transfer of the locality of the digester. And if he should hire French valets in France in lieu of a portion of his claret, no possible difference could be made thereby to the people left at home.

Sixth Case; instead of going over to his French valets, let the Sheffield-man stay at home, but declare that he will be waited on by none but Frenchmen, and that he will have a host of French valets brought over for this purpose, to the exclusion of his own countrymen who are languishing to have the honour of receiving his commands. And when these Frenchmen come, let him pay them with his razors. It looks very much as if this could make no difference:—as if it amounted to the same thing in the end, as the Frenchmen being paid with the razors abroad. If they keep any part of them for their own shaving, the only difference is that there is a Frenchman with a razor in his pocket on this side of the Channel instead of the other; if they sell any part of them for the sake of buying other things, they diminish the orders on razor-makers at large with the one hand, and increase the orders on those trades with whom they spend the money with the other. It appears therefore that the calling over and paying the French valets,—though it is undeniably taking the

bread out of the mouths of the fraternity of British valets,—is putting bread to the same amount *into* the mouths of some other class or classes of British traders; the truth being, that precisely the same effects are produced in the aggregate, as if the razors had been purchased for the foreign market, and sent over and consumed in France, in return for any kind of French produce to be consumed either here or there by the purchaser of the razors.

Seventh Case; let the Sheffield-man be brought to a change of mind, and declare that he will buy ale, and pay for it with his razors. This case will be the same in its aggregate results, as if he had sent his razors into the home market in the usual way, and then bought ale with the money. For if the ale-dealers keep any of the razors for their own use, it is the same thing as if the razors had been sent into the home market by the cutler, and the money got there for them given to the men of ale to buy them out again. And if they sell any for the sake of buying other things, it is only *their* sending the razors into the home market instead of the cutler, and spending the money got for them in the same way as if they had got it from the cutler. The truth therefore is, that in this case precisely the same effects are produced in the aggregate, as if the razors were sold in the home market by the cutler, and the money laid out in ale.

Eighth Case; let the Sheffield-man once more change his mind, and say "I won't have ale; but I will consent to take footmen from my countrymen, and send away the Frenchmen." In this case there is only a substitution of the labour of footmen and their dependencies, for that of ale-makers and their dependencies. If the payment is made in money, then the footmen &c. spend the money upon meat, drink, clothing, lodging for themselves or wives and children, which they severally consume, enjoy, and see the end of; and the persons concerned in producing the ale, would have done the like with such portions of the payment as might finally have fallen to their several shares. Or if it is made in razors, then what they use and what they sell may be accounted for as in the preceding Case. If the footmen and their dependencies will consume all, the ale-makers and their dependencies would consume all. There seems no pretence for saying that there is anything about the labour of the footmen which puts it in a different category from the labour of the ale-makers, so long as the payer, the Sheffield-man, is willing to accept one as equivalent to the other.

It appears then, that in respect of aggregate or national advantage, keeping and paying a British footman is the same thing as ordering and consuming the produce of any other kind of

British labour to the same amount; and that bringing over and paying a French valet in his place, is the same thing as ordering a quantity of British goods to the same amount, and sending it to France to be exchanged for some kind of French produce and consuming *that;* and moreover, that in these two pairs of equals, the last-mentioned in each are equal to one another.

And here comes in a paradox, which has been alluded to on a former occasion *. "Give the money," it may be said, "to the British valet instead of the French one; and a countryman will be comforted to the amount, and all British interests in the aggregate remain as before." And the reason why,—because the British valet will expend the money upon somebody, just as much as *you* will if you expend it on goods you chuse to give away to the French.

This is the same fallacy as if, in the celebrated instance where the nobility of Europe left off keeping "tails" of followers and took to wearing embroidery and jewellery instead, it should have been urged, 'Keep up your "tails," and the "tails" will spend the money just as much as *you* will if you spend it on the embroiderers and jewellers; the benefit therefore to the

* Westminster Review for January 1829, Art. 15, on *Absenteeism.* See pages 53 and 54 of Vol. I of the present Work.

This part of the subject has been greatly cleared by subsequent agitation. The simplest case in point, is that of supposing yourself to be advised to have your firewood cut with a blunt axe instead of a sharp, in order that you may pay two shillings weekly for two days' work of a woodcutter, instead of one shilling for one. Upon which it is clear, that the gain to the woodcutter is exactly balanced by the loss to some other kind of trader, say a gardener, who used to be paid to do a day's work weekly for the purpose of producing you cabbages; so that, setting off these two against each other, the loss of a shilling to you the consumer of the wood, remains a final and uncompensated loss. And not only is the gain of the woodcutter equal to the loss of the gardener, but all the consequences, to the greatest possible extent, are precisely and glaringly equal. If the woodcutter expends the shilling for the benefit of other trades, so would the gardener have expended it for the benefit of other trades. They might even by possibility be the same trades, for it might be that the woodcutter and the gardener would have laid out the shilling, (whichever of them had got it,) on the same baker or the same beer-seller; but that they would be *some* trades, and to the amount of a shilling, is as plain in one case as in the other. If you the user of the wood (overlooking the fact that in one case you were to pay the shilling and get no cabbages) were to debate the question with reference to the woodcutter and gardener alone, the question would simply be, Shall I give a shilling for the benefit of a woodcutter and the trades on which he will expend it, or for the benefit of a gardener and the trades on which he will expend it?

In this state of the argument, stands up an advocate for the monopoly of the blunt axe, and tries to puzzle the case by exclaiming, "O, but if you would have expended the shilling on somebody as for instance a gardener, it is plain that the woodcutter will expend it on somebody too, to the equal advantage of trade in the aggregate." Which is refusing to set off the woodcutter's gain and its consequences against that which is their visible counterpart viz. the gardener's loss and its consequences, and insisting on setting them off against an expenditure which, in the language of mathematicians, is *of a different order.*

The same kind of refusal to set off a quantity against what is its visible counterpart, and insisting on setting it off against what is not, is at the bottom of what is in the text called the *paradox.*—Added in 1839.

rest of the country will be the same as ever, and the enjoyment to the " tails" will be clear gain.'

The answer to this would be, that the enjoyment to the " tails" and their dependencies, is equal to the enjoyment to the embroiderers &c. and 'their dependencies; and because *these two parties* will equally spend the money, the further consequences will be equal in the aggregate. And because this *is* true, it follows that the other *is not.*

No person has ever thought of denying the existence of the balance in the instance of the transfer of the custom of the nobility above described; or of doubting, that with the exception of the temporary difficulties attendant on all transfers, the effect was to raise up a population of embroiderers and jewellers, instead of a population of turbulent tail's-men. And one reason why nobody has doubted it, is that the contrary assertion would cut equally either way.. If the feudal followers might assert, that they should spend the money as much as the embroiderers &c., and therefore their enjoyment of the money would be clear gain,—why might not the embroiderers &c. equally urge, that *they* should spend the money just as much as the followers, and therefore *their* enjoyment of the money would be clear gain? But an argument that will tell equally for either of the contending parties, is manifestly good for neither.

The paradox, however, may be urged further. Suppose that the feudal followers *would buy embroidery**. Would not the gain to the embroidering trade be the same as if the embroidery had been ordered by the nobles, or for foreign consumption; and consequently the enjoyment by the followers clear gain?

It may be replied, that the gain to embroiderers from the followers buying embroidery, will only be the same as would be the gain to comb-makers if they were to buy small-tooth combs. And if they were to buy small-tooth combs, there seems no pretence for saying, that the gain to the followers would not be balanced by a loss to the embroiderers *or to somebody else.* Whence, if the gains whether to embroiderers or to comb-makers would be equal, it may be gathered that the gain to the followers would be balanced by a loss to the embroiderers or somebody else, in the case where they should chuse to spend their money on embroidery.

The defenders of the paradox will answer, that the value of the gain or loss to embroiderers is made of two different magnitudes;—that at one time it is made equal to all the enjoy-

* This again, is only an effort to embarrass the question by getting up a confusion between expenditures *of different orders.*—Added in 1839.

ment that arises from giving the money to the followers, the followers *included*,—and at another time not equal.

This is true. Where there is the semblance of two contradictory sets of truths, there must be a step wanting to make them coincide. The step that would effect coincidence here, would be establishing that the gain or loss to the dealers of all kinds existing in the country, from the expenditure or non-expenditure of a given sum of money, is *less* after the sum in question has been given to the followers, than it would have been if the same money had been expended by the nobles or for foreign consumption. And the way in which such an effect can be produced, can apparently be only through the fact that employing the followers takes part of the transferable labour out of the labour market,—makes labour to everybody somewhat scarcer and dearer,—and that the result is a loss divided among all the purchasers of labour in the country, which makes up for the difference in dispute.

This has perhaps driven the question into a smaller compass, by removing the difficulty that attached to the portion that should be supposed expended by the successful rival upon the other. Labour, in fact, is a commodity in the market like anything else; and the same reasoning that applies to the portion of his receipts which a feudal follower might expend upon embroidery, may be applied to what the ale-dealer might expend upon razors.

If it should be represented that the feudal followers are in great want and distress,—and, for argument's sake, that they are obliged to be maintained by the rest of the community by the means of poor-rates;—this can alter nothing in the aggregate, if the industrious people who are to be cut off from the market for their embroidery or their razors are equally distressed, and parts and portions of them equally subjected to the necessity of being maintained by poor-rates.

Two errors may be noted, or suspected, as attaching to the opponent's side. One is, the statement of the Quarterly Reviewers, that when commodities are sent out of a country "to pay absentee landlords, *that country receives no return*, except receipts for rent can be represented in that light*." Now the simple fact is, that these commodities have been paid for once already, and there is no justice in demanding that they shall be paid for any more. If a man in London had a pot of porter at his mouth, which was his own and he had paid for, it would be very hard to say to him, "Wretch, are you going to be so

* Quarterly Review, No. LXVI. Article on Irish Absentees, p. 460.

unpatriotic as to drink all that yourself? Remember your country, and see that a proper return is made to her before you drink a drop." The man would naturally reply, "I *have* done so, Sir; I have *paid* for it, your Worship; I have given hard work for it to somebody, your Honour; or if I did not, my father did before me. He raised a little estate, he did, Sir; and I bought this very porter out of the income." Heaven help the Tory, who should thus attempt to stop an Englishman's porter in its course. And suppose the Englishman bottles up the contents of his pot, and sends it off to Calais to be exchanged for a bottle of *vin ordinaire* with some porter-loving Frenchman;—or whips himself into the steam-boat for Calais with the porter in his pocket, and consoles himself with drinking it on his arrival;—or makes the exchange there for *vin ordinaire*, and gives himself the gripes at Calais instead of Dover;—in any of these cases, where does there arise the smallest plea for saying the man has done an unpatriotic act in the disposition of his porter? Where is there a gain to any living creature taken away, that would have been made if the man had swilled his porter at home; and where the pretext for saying, that the porter has been taken out of the country to the destruction of some due return? The whole is manifestly a mistake, a double charge. The return due to the beloved country for the porter, was made when the porter was bought and paid for; and no power on earth can show any injury from its progress afterwards. The objection of the Quarterly Reviewers seems to be completely answered. The *paradox*, is *not* theirs.

Another error which may be suspected, is that there is some connexion with a want of thorough comprehension of the way in which what Adam Smith calls "effectual demand" creates supply;—a mistake of the same kind, as that of the mob that stops a brig loaded with potatoes for the metropolis, in the expectation that this is to make potatoes cheap for ever and ever in their own market. There is a confusion between a momentary gain, and an enduring and recurring one. The appropriation of the potatoes may benefit the potatoe-eaters in the parish for the next fortnight; but nature will find out the way, to put a stop to their expected perpetuity of gormandizing at other people's loss. In like manner the stoppage of the transit of an absentee's goods or money, and forcing him to expend in a particular market and come here to consume the produce, might do a brief benefit to certain parties in the parish, in the same way as in the stoppage of the potatoes; but it remains to be seen whether nature will not have her ways and means, to avenge herself on the stupid tyranny, and disappoint the mob of their expected gains.

If all this be true, it assuredly leads to some startling results. It goes to prove, that if a nation employs foreigners to do its work,—as the Portuguese employ *Gallegos*,—it is the same thing to Portugal in the end. It goes to prove, that if the Irish aristocracy should take into their heads to expend their revenues in paying foreign regiments either at home or abroad, to the exclusion of all employment in that way to native Irish, the last state of Ireland would be in the aggregate the same as the first. There is no desire to disguise the length to which the principle would go; the only object is to know if it is true*.

If it be substantially correct, then the immediate consequence is, that the result of any tax on Absentees, as on foreign consumption in general, would be the inflicting a pure grievance on the sufferers, to the extent of what they might pay or give up to avoid paying; without the shadow of aggregate advantage to their countrymen in return. And that consequently such an effort of legislation would be a simple ebullition of ill-humour, a mere employment of the faculty of voting in the House of Commons to plague a neighbour, a naked exertion of the arbitrary power of saying to a fellow-citizen, "I don't like people to drink claret. Drink none."

The general inference from all the above is, that whatever perplexity may be found in some of the details, it will finally be discovered that Heaven has set its canon that nothing shall be lost to a community in the aggregate, by using foreign produce instead of its own,—and for the reason which he that runs may read, that it can never have foreign produce but in barter for something of its own. It is part and portion of the arrangement of Providence, for promoting peace on earth and good will towards men, as fast as the race of political blunderers who have kept nations at daggers-drawing on false pretences, can be driven off the scene.

These considerations are turned over to the speculation of such as feel aggrieved and threatened by the hubbub kept up on the subject of Absenteeism; with a view to engaging their attention and support to the general principles of Free Trade, of which their particular concernment appears to be an offset.

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* Neither landowners nor traders of any kind, were ever heard protesting *as such*, against the employment of the German Legion either at home or abroad, in lieu of the same number of English clodhoppers who might by possibility have been enlisted instead. On the contrary, it is probable they had always a more or less distinct vision of the fact, that in one way or other they had the custom of the Germans and of the clodhoppers too.

This is not given as being decisive; but only as showing that there may be results and tendencies which do not thrust themselves upon the earliest view.—*Added in* 1839.

PARAGRAPHS

to be added in the Article on the "Enharmonic of the Ancients," to the Note beginning "A late Mathematical Professor," in page 120 of the present Volume.*

In some modern Instruction-books of name (*J. B. Cramer's for the Pianoforte*) a return is made to what is understood to have been the practice of the early moderns, but subsequently given up,—the introduction of the Major Sixth as well as Seventh, in the ascending scale in the Minor series.

If a scale was to be considered as a tune, or something which was to produce a musical effect by itself, it might be discretionary whether the Major Sixth should be introduced or not. But instead of this, a scale is a collection of the notes usually presenting themselves in a certain key or series, intended to familiarize the learner with their execution. Now, in airs or tunes in the Minor series, it is practically found that there *is* a constant or very frequent occurrence of the Major Seventh in the ascending scale; in fact the notes are hardly ever found ascending without it. But there *is not* the same occurrence of the Major Sixth; and in fact a Major Sixth can hardly be found oftener than any other note may be capriciously or accidentally affected by a Sharp.

The inference from this would appear to be, that the musical authorities were in the right, who abandoned the introduction of the Major Sixth into the ascending scale in the Minor series as taught to learners; and that the return to the older custom, is not only a useless complication and difficulty to the performer, but errs in inculcating the habit of what is *not* to be executed in general practice, instead of the habit of what *is*.—*Added in* 1839.

NOTE

to be added to the second paragraph of the Article on "Gardiner's Music of Nature" in page 282 of the present Volume.

*The experiments detailed in the following extracts, throw light on the formation of musical as distinguished from unmusical sounds.

'M. Savart had a wheel made about nine inches in diameter, with three hundred and sixty teeth set at equal distances round its rim; so that while revolving, each tooth successively struck against a card. When the wheel's motion was so slow as for a less number than sixteen teeth to strike the card in a second, each stroke was distinctly heard as a *separate noise*. But when the velocity of the wheel's motion was increased to allow of sixteen strokes in a second, then, in place of hearing sixteen separate noises, a *continued sound* was heard which entirely differed from the *noises composing it*.'

. . . . . .

'When Mr. Savart's wheel revolved at the rate that fifteen impulses (of the teeth against the card) occurred in a second, he heard fifteen separate noises; but when he increased the rate of revolution, so as to allow of sixteen impulses in a second, a continuous sound was produced. Now, so long as the wheel continued to revolve at the same rate, the resulting sound continued of an uniform pitch. He found on increasing the rate of revolution (which consequently produced a greater number of impulses in a second), that the resulting sound was of a higher pitch. When the rapidity arrived at the rate of thirty-two impulses in a second, the resulting sound was an octave higher than that at sixteen. It required a rate of sixty-four in a second to reach another octave. And it was invariably found, that, when the rate of revolution was changed, the resulting sound was of a different pitch; thus a decrease of the velocity lowered the pitch of the sound, and an increase of the velocity raised the pitch of the sound.'—*Phrenological Journal for* 1 *July*, 1839. *p.* 249.

END OF VOL. II.

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